







Administrative County of Middlesex.

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# ANNUAL REPORT

OF THE

COUNTY MEDICAL OFFICER OF HEALTH

FOR THE

YEAR 1934.

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LONDON :  
HARRISON AND SONS, LTD., ST. MARTIN'S LANE, W.C.2,  
*Printers in Ordinary to His Majesty.*

—  
1935.

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TO THE CHAIRMAN, ALDERMEN AND MEMBERS  
OF THE COUNTY COUNCIL OF MIDDLESEX.

SIR, MY LORD, LADIES AND GENTLEMEN,

I have the honour to submit my annual report for the year 1934.

The statistics which appear in the earlier pages of the report are an indication of the continued satisfactory condition of the health of the residents of the County. The birth-rate for the first time for the past six years shows a slight increase, *i.e.*, from 13·9 per 1,000 living in 1933 to 14·6 per 1,000 in 1934, whilst at the same time the rate of infantile mortality, far from showing an increase, is slightly lower than in the previous year.

Similarly the death-rate at all ages and from all causes shows a slight decrease and now is 9·6 per 1,000 persons living, as compared with the rate of 11·8 in the country generally. The greatest reduction in death-rates is to be observed in the rate of maternal mortality, which has declined from the unusually high figure of 4·77 deaths per 1,000 births in 1933 to a more average total of 3·60 per 1,000 during the year under review.

Many subjects of considerable importance have engaged the attention of the Council during the past twelve months and decisions have been reached which mark substantial progress in the County Council's contribution towards the care and comfort of the sick for whom it is responsible. I refer especially to the decisions of the County Council to appropriate its hospitals in 1936 as public health hospitals, and to reserve institutions adjoining the hospitals as establishments for the treatment of persons suffering from chronic illness, constituting these institutions an integral part of the hospital service.

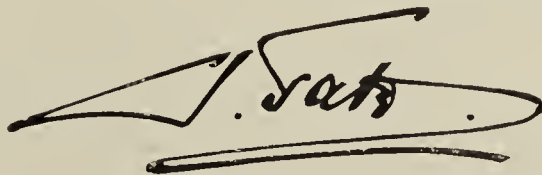
Various plans for the extensions of the County Hospitals received consideration during the year and schemes of modernising and extending the hospitals were proceeded with; buildings and equipment, however, are of little importance compared with the efficiency of the staff employed in the service. This fact is fully appreciated by the Council and their action in May in adopting a grading scheme for medical officers, calculated to attract and retain in the Council's service medical men and women of the highest qualifications and experience, merits the approval of all residents in the County who may have occasion to utilise the Council's hospitals.

The report contains reference to many other matters of interest, such as the decisions to establish a country hospital branch and to establish psychiatric clinics at the County general hospitals, the acceptance of tenders for the rebuilding of Harefield County Sanatorium, &c., but, for information with regard to these, reference should be made to the body of the report.

In conclusion, I should be doing less than justice to the members of the County Council engaged in the work of public health in the County if I did not again refer to the amazing enthusiasm and energy with which they continue to carry out the duties they have undertaken. I desire especially to record my indebtedness to the Chairman of the Public Health Committee and the Chairmen of the several Committees of Hospital Management for their advice and assistance, and to express to them my appreciation and thanks for their continued support. It is also my pleasure to be able to acknowledge the loyal and willing service rendered by every member of the staff of the Public Health Department, whilst the help afforded to me by my deputy, Dr. Macaulay, both in the preparation of this report and in the work of the department generally, is worthy of special mention.

I have the honour to be,

Your obedient Servant,



*County Medical Officer.*

PUBLIC HEALTH DEPARTMENT,  
10, GREAT GEORGE STREET,  
WESTMINSTER, S.W.1.

October, 1935.

## Staff.

## WHOLE-TIME OFFICERS.

*County Medical Officer of Health and School Medical Officer :*

J. Tate, M.R.C.S., L.R.C.P., D.P.H.

*Deputy County Medical Officer of Health and Deputy School Medical Officer :*

H. M. C. Macaulay, M.D., B.S., B.Sc., D.P.H.

*Assistant County Medical Officers of Health :*

A. C. T. Perkins, M.D., B.S., D.P.H.

Miss M. Back, M.D., B.S., D.P.H.

*Tuberculosis Medical Officers :*

F. R. B. Atkinson, M.D., C.M. (retired 16th October, 1934).

O. Bruce, M.R.C.S., L.R.C.P.

S. Trevor Davies, M.R.C.S., L.R.C.P.

J. R. B. Dobson, M.B., B.S., B.Sc.

H. Evans, M.D., Ch.B., D.P.H.

W. S. Forbes, M.B., Ch.B., D.P.H.

F. A. H. Simmonds, M.A., M.B., B. Chir.,  
D.P.H. (commenced duty 17th October,  
1934).*Assistant Medical Officers :**(Maternity and Child Welfare and School Medical Inspection and Treatment.)*

Mrs. A. M. Burn, M.B., Ch.B., D.P.H.

Miss J. R. Campbell, M.B., Ch.B., D.P.H.

Miss K. M. Cellan-Jones, M.D., B.S., B.Hy.,  
D.P.H.

Miss K. Glyn-Jones, M.R.C.S., L.R.C.P.

W. R. H. Heddy, M.R.C.S., L.R.C.P., D.P.H.,  
Barrister-at-Law.

H. W. Moir, M.B., Ch.B., D.P.H.

Lieut.-Col. H. L. W. Norrington, D.S.O.,  
M.R.C.S., L.R.C.P.

G. J. Roberts, M.D., Ch.B., B.Sc., D.P.H.

Miss M. K. Ruddy, M.D., B.S., B.Sc.

Mrs. R. H. Shelley, M.B., B.S.

Miss G. Wilson, M.A., M.B., Ch.B., D.P.H.

*Veterinary Inspector :**(Milk and Dairies (Consolidation) Act, 1915, and Milk and Dairies Order, 1926.)*

R. Wooff, M.R.C.V.S. (commenced duty 17th January, 1934).

*Senior Dental Officer :**(Maternity and Child Welfare, County Sanatoria, School Dental Treatment.)*

S. J. Smith, L.D.S.

*Assistant Dental Officers :**(Maternity and Child Welfare and School Dental Treatment.)*

J. V. Bingay, L.D.S.

R. E. Cook, L.D.S.

Miss C. M. Henderson, L.D.S.

R. V. Kingham, L.D.S.

Mrs. C. S. Leiper, L.D.S. (retired 1st January,  
1934).Miss A. M. Munro, L.D.S. (commenced duty  
14th May, 1934).

Mrs. I. M. Pritchard, L.D.S.

*Inspector of Midwives :*

Miss C. A. M. Coleman, S.R.N., S.C.M.

Tuberculosis Dispensary Nurses	..	..	..	..	..	..	..	13
Health Visitors and School Nurses	..	..	..	..	..	..	..	28
Dental Nurses	..	..	..	..	..	..	..	7
Midwives	..	..	..	..	..	..	..	2



## PART-TIME OFFICERS.

*Consulting Obstetric Physicians :*(1) *Central Ante-natal Clinic :*

J. S. Fairbairn, M.A., F.R.C.S., F.R.C.P., P.C.O.G.

(2) *Puerperal Fever, &c., Regulations, 1926 :*

J. M. Wyatt, M.B., B.S., F.R.C.S.

*Ophthalmic Surgeons :**(Maternity and Child Welfare, School Medical Service, Certification of Blind Persons.)*

E. F. King, M.B., Ch.B., F.R.C.S., D.O.M.S.

C. D. Shapland, M.B., B.S., M.R.C.P., F.R.C.S.

*Assistant Medical Officers :**(Maternity and Child Welfare.)*

L. W. Hignett, M.B., C.M., D.P.H.

J. W. Poole, M.B., B.S.

## HOSPITALS, INSTITUTIONS AND SANATORIA.

## NORTH MIDDLESEX COUNTY HOSPITAL.

*Medical Superintendent :*

Ivor Lewis, M.D., M.S., D.P.H.

*Deputy Medical Superintendent :*

A. W. Gregorson, M.D., Ch.B., F.R.F.P.S.

*Physician :*

C. A. Birch, M.D., M.R.C.P., D.P.H.

*Surgeon :*

R. L. Galloway, M.B., Ch.B., F.R.C.S. (Edin.).

*Assistant Medical Officers :*

K. A. Hudson, M.B., Ch.M., M.C.O.G.

A. Burkhardt, M.B., B.S.

P. J. Nagle, M.B., B.Ch., B.A.O.

E. B. Jackson, M.D., B.S., M.R.C.P.

Miss A. M. E. McCabe, M.D., B.Ch., B.A.O.,  
M.R.C.P., D.P.H.

Miss E. A. Pennycuik, M.B., Ch.B.

F. N. Foster, M.B., Ch.B., F.R.C.S.

Miss M. A. Bromhall, M.B., Ch.B., D.M.R.E.

M. R. Thomas, M.D., M.R.C.P.

R. S. Ogborn, M.B., B.S., M.R.C.P.

M. Coke, M.R.C.S., L.R.C.P.

Miss M. Sutcliffe, M.A., M.R.C.S., L.R.C.P.,  
D.P.H.*Matron :*

Miss L. F. Dykes.

## WEST MIDDLESEX COUNTY HOSPITAL.

*Medical Superintendent :*

J. B. Cook, M.D., Ch.B., D.P.H.

*Deputy Medical Superintendent :*

Miss M. W. Warren, M.R.C.S., L.R.C.P.

*Pathologist :*

W. Broughton-Alcock, B.A., M.B., M.R.C.S., L.R.C.P.

*Assistant Medical Officers :*

A. W. Badenoch, M.A., M.D., F.R.C.S.

G. Stephen, M.B., Ch.B.

M. M. Deane, M.D., B.S., M.R.C.P., D.P.M.

Miss I. M. Titcomb, M.A., B.M., B.Ch.

J. A. McLean, M.D., B.S., M.R.C.P.

*Matron :*

Miss E. Huggins.

## CENTRAL MIDDLESEX COUNTY HOSPITAL.

*Medical Superintendent :*

W. E. Turner, M.R.C.S., L.R.C.P.

*Deputy Medical Superintendent :*

T. G. I. James, M.B., M.Ch., B.Sc., F.R.C.S. (Eng. and Edin.).

*Assistant Medical Officers :*

N. M. Matheson, M.B., Ch.B., F.R.C.S., M.R.C.P.

A. D. Abdullah, M.B., Ch.M., M.R.C.P.

J. S. MacVine, M.B., B.S., M.C.O.G.

H. Canwarden, M.R.C.S., L.R.C.P.

J. Sakula, M.B., B.S.

*Matron :*

Miss B. Gebhard.

## REDHILL COUNTY HOSPITAL.

*Medical Superintendent :*J. N. Deacon, *M.C.*, *M.B.*, *B.S.**Deputy Medical Superintendent :*E. B. Brooke, *M.A.*, *M.B.*, *B.Chir.*, *M.R.C.P.*, *D.P.H.**Assistant Medical Officers :*J. H. Attwood, *M.B.*, *B.S.*D. B. Craig, *L.R.C.P.*, *F.R.C.S.* (*Edin.*).*Surgeon (part-time) :*R. Trevor Jones, *M.B.*, *B.S.*, *B.Sc.*, *F.R.C.S.**Matron :*

Miss E. R. Wheeldon.

## HILLINGDON COUNTY HOSPITAL.

*Medical Superintendent :*W. A. Steel *M.D.*, *Ch.B.*, *M.R.C.P.*

(commenced duty, 16th May, 1934).

*Assistant Medical Officers :*L. Fatti, *M.B.*, *B.S.*, *F.R.C.S.*Miss J. Morgan, *M.D.*, *B.S.*, *B.Sc.*, *M.C.O.G.**Matron :*

Miss E. S. Laing.

## STAINES INSTITUTION.

*Medical Officer (part-time) :*L. R. Pickett, *M.R.C.S.*, *L.R.C.P.*

## EDGBURY CONVALESCENT HOME, WOBURN SANDS.

*Medical Officer (part-time) :*J. N. Alexander, *M.R.C.S.*, *L.R.C.P.**Matron :*

Miss M. A. Bishop.

EDMONTON HOUSE, ENFIELD HOUSE, CHASE FARM SCHOOLS, REDHILL INSTITUTION,  
WARKWORTH HOUSE, HILLINGDON INSTITUTION, WHITE WEBBS HOME.

The medical care of patients and inmates in these institutions is provided by the medical  
staffs of the hospitals set out above.

## COUNTY SANATORIUM, HAREFIELD.

*Medical Superintendent :*J. R. McGregor, *M.B.*, *Ch.B.*, *D.P.H.**Acting Deputy Medical Superintendent :*K. R. Stokes, *M.R.C.S.*, *L.R.C.P.**Assistant Medical Officers :*D. G. M. Edwards, *M.B.*, *B.S.*, *D.P.H.*

V. C. Benson, *M.A.*, *M.R.C.S.*, *L.R.C.P.*  
(commenced duty, 18th October, 1934).

*Matron :*

Miss C. Woodward.

## COUNTY SANATORIUM, CLARE HALL, SOUTH MIMMS.

*Medical Superintendent :*A. C. Tabois, *M.D.**Deputy Medical Superintendent :*J. T. N. Roe, *M.D.*, *Ch.B.*, *D.P.H.**Assistant Medical Officer :*J. O. Williams, *M.R.C.S.*, *L.R.C.P.**Matron :*

Miss M. Brown.

## PUBLIC VACCINATORS AND DISTRICT MEDICAL OFFICERS (PUBLIC ASSISTANCE).

District.	Name and Qualifications.
<i>North Middlesex—</i>	
Edmonton (North) .. .. .	A. E. Tughan, L.R.C.S., L.R.C.P., L.R.F.P. & S.
Edmonton (South) .. .. .	J. Shaw, M.A., M.B., Ch.B.
Enfield (Cockfosters) .. .. .	H. C. Woodcock, M.R.C.S., L.R.C.P.
Enfield (Cooper's Lane) .. .. .	} A. Jephcott, B.A., M.R.C.S., L.R.C.P.
Enfield Town .. .. .	
Enfield Highway and Ponders End ..	J. E. Hill, M.B., B.Ch.
South Mimms .. .. .	W. E. Hayes, M.B., B.Ch.
<i>North-East Middlesex—</i>	
Finchley (North) .. .. .	S. R. Gleed, M.R.C.S., L.R.C.P.
Finchley (South) .. .. .	T. W. Hicks, M.D.
Friern Barnet (North) .. .. .	G. P. Evans, M.R.C.S., L.R.C.P.
Friern Barnet (South) .. .. .	{ I. S. Fox, M.B., Ch.B. (D.M.O. only.) G. P. Evans, M.R.C.S., L.R.C.P. (P.V. only).
Southgate .. .. .	
Winchmore Hill .. .. .	H. C. Woodcock, M.R.C.S., L.R.C.P.
Wood Green .. .. .	S. R. Eccles Davies, B.A., M.R.C.S., L.R.C.P., D.P.H.
	F. James, M.R.C.S., L.R.C.P.
<i>East Middlesex—</i>	
Highgate .. .. .	E. F. Buckler, M.B., Ch.B.
Hornsey (Harringay) .. .. .	R. S. Anderson, M.R.C.S., L.R.C.P.
Tottenham (High Cross) .. .. .	Burton Yule, M.B., Ch.B., D.P.H.
Tottenham (Lower E.) .. .. .	J. Devine, L.R.C.P. & S.
Tottenham (Lower W.) .. .. .	A. Wilson, M.B., Ch.B.
Tottenham (West Green) .. .. .	Miss Fanny Cattle, B.Sc., M.R.C.S., L.R.C.P.
<i>North-West Middlesex—</i>	
Burnt Oak and Watling Estate .. ..	Miss Margaret I. Little, M.R.C.S., L.R.C.P.
Edgware, Little Stanmore and Lower Hale	D. M. C. Church, M.B., Ch.B.
Golders Green and Hampstead Garden Suburb.	L. Myers, M.B., B.S. (P.V. only.)
Great Stanmore and Harrow Weald ..	H. A. Byworth, M.A., B.M., B.Ch.
Harrow-on-the-Hill .. .. .	C. M. Pennefather, M.D., B.S.
Hendon Central and Hendon West (part) ..	W. A. L. Dunlop, M.B., B.Ch., B.A.O.
Hendon (South) .. .. .	R. W. Baron, M.B., Ch.B.
Kingsbury .. .. .	Miss Mary H. Routledge, M.B., Ch.B., D.P.H.
Mill Hill (part) .. .. .	A. H. Morley, M.B., B.S.
Pinner .. .. .	M. J. Johnston, M.D., Ch.B.
Wealdstone .. .. .	Miss Lucy Parker, M.D., B.S., M.R.C.P.
Wembley .. .. .	H. E. Dyson, M.D., B.S.
<i>Central Middlesex—</i>	
Acton .. .. .	H. Sparrow, M.A., M.R.C.S., L.R.C.P.
Harlesden .. .. .	C. F. T. Scott, M.B., Ch.B. (P.V. only.)
Kilburn .. .. .	*P. Smith, M.D., B.S., D.P.H.
Willesden (No. 1) .. .. .	H. G. Broadbridge, M.B., B.S. (D.M.O. only.)
Willesden (No. 2) .. .. .	R. Aidin, M.D., B.Ch., D.T.M. (D.M.O. only.)
Willesden (No. 3) .. .. .	*P. Smith, M.D., B.S., D.P.H.
<i>South Middlesex—</i>	
Ealing (part) and West Twyford .. ..	J. Gubbins, M.R.C.S., L.R.C.P.
Hanwell and Ealing (part), Greenford and Perivale.	A. M. Caverhill, M.D., Ch.B., D.T.M.
Northolt .. .. .	Miss Olive J. E. G. Mulligan, M.B., Ch.B., B.A.O.

\* Dr. P. Smith is Public Vaccinator for Kilburn and District Medical Officer for Willesden (No. 3).



District.	Name and Qualifications.
<i>South Middlesex—(contd.)—</i>	
Brentford .. .. .	R. C. Neil, M.R.C.S., L.R.C.P.
Chiswick .. .. .	A. D. Dueat, M.B., M.R.C.S., L.R.C.P.
Heston and Isleworth (part) ..	{ L. B. Christian, M.B., C.M. (P.V. only.) R. Serjeant, M.R.C.S., L.R.C.P. (D.M.O. only.)
Isleworth (part) .. .. .	
	W. W. Phillips, M.B., Ch.B.
<i>West and South-West Middlesex—</i>	
Ashford .. .. .	L. R. Pickett, M.R.C.S., L.R.C.P.
Bedfont, Feltham and Hanworth ..	V. C. Montgomery, M.B., B.Ch., B.A.O.
Cowley and Hillingdon .. .. .	H. Vickers, M.R.C.S., L.R.C.P.
Cranford, Harlington and Harmondsworth (Sipson and Heathrow)	P. Coffey, L.R.C.P., L.R.C.S.
Hampton .. .. .	C. de Z. Marshall, M.R.C.S., L.R.C.P.
Hampton Hill (S. James) .. .. .	V. V. Morgan, M.R.C.S., L.R.C.P.
Hampton Wick .. .. .	H. A. Gunther, M.B., M.R.C.S., L.R.C.P.
Harefield .. .. .	J. T. Dunkerley, M.R.C.S., L.R.C.P.
Harmondsworth (Longford) and Stanwell..	J. A. Edwards, M.R.C.S., L.R.C.P.
Hayes .. .. .	J. N. Parrott, M.R.C.S., L.R.C.P.
Laleham and Staines.. .. .	A. C. Mann, M.B., B.Ch.
Norwood .. .. .	J. McKenna, M.B., B.Ch.
Ruislip .. .. .	D. D. Ritchie, M.A., M.D., Ch.B.
Shepperton and Littleton .. .. .	A. Urquhart, M.A., M.B., Ch.B., D.P.H.
Sunbury .. .. .	A. J. Reid Taylor, M.B., Ch.B.
Teddington .. .. .	C. G. A. Sadler, M.R.C.S., L.R.C.P.
Twickenham .. .. .	W. L. Cassells, B.Sc., M.B., Ch.B.
Uxbridge and Ickenham .. .. .	W. T. Dobson, M.R.C.S., L.R.C.P.
Yiewsley and West Drayton .. .. .	Miss Jessie G.A. Norman, M.R.C.S., L.R.C.P.

*Public Vaccinators for Hospitals and Institutions in the County.*

Hospital or Institution.	Name and Qualifications.
North Middlesex County Hospital, Edmonton House, Enfield House and Chase Farm Schools.	I. Lewis, M.D., M.S., D.P.H.
Redhill County Hospital and Redhill Institution .. ..	J. N. Deacon, M.C., M.B., B.S.
Staines Institution and Children's Home, Ashford .. ..	L. R. Pickett, M.R.C.S., L.R.C.P.
Hillingdon County Hospital and Hillingdon Institution ..	W. A. Steel, M.D., Ch.B., M.R.C.P.
Children's Home, Hillingdon (Bartram Lodge) .. .. .	H. Vickers, M.R.C.S., L.R.C.P.
West Middlesex County Hospital, Warkworth House, Islewort' ; Central Children's Home, South Middlesex Area (Dundee House, Isleworth).	J. B. Cook, M.D., Ch.B., D.P.H.
Central Middlesex County Hospital ; Children's Homes, Willesden Area	W. E. Turner, M.R.C.S., L.R.C.P.
Ashford Residential School (L.C.C.) .. .. .	W. Dale, M.R.C.S., L.R.C.P.
Erskine Hill, Hendon Residential School (L.C.C.) .. ..	H. N. Payne, M.D., B.S., D.P.H.

# SUMMARY OF IMPORTANT STATISTICS RELATING TO THE ADMINISTRATIVE COUNTY OF MIDDLESEX.

Area (including inland water) .. .. .	148,691 acres.
Population 1931 (census) .. .. .	1,638,728
„ 1934 (estimated for mid-year) .. .. .	1,810,200
Number of structurally separate dwellings occupied, 1931 (census) .. .. .	348,595
Number of private families, 1931 (census) .. .. .	431,368
Rateable value, 1934 (1st April) .. .. .	£16,383,111
Product of a penny rate, Financial Year 1934-35 .. .. .	£67,788
Live births—	Total. Male. Female.
Legitimate .. .. .	25,421 12,994 12,427
Illegitimate .. .. .	955 520 435
Birth-rate .. .. .	14·6
Stillbirths .. .. .	884
„ Rate per 1,000 total births .. .. .	32·4
Deaths .. .. .	17,367
Death-rate .. .. .	9·6
Number of women dying from diseases and accidents of pregnancy and childbirth :—	
From sepsis .. .. .	46
From other causes .. .. .	49
Maternal mortality rate per 1,000 live births .. .. .	3·60
Infantile mortality rate per 1,000 live births :—	
Legitimate .. .. .	44
Illegitimate .. .. .	95
Total .. .. .	45·5
Deaths from measles (all ages) .. .. .	143
„ whooping cough (all ages) .. .. .	63
„ diarrhoea (under 2 years of age) .. .. .	103



# Administrative County of Middlesex.

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## ANNUAL REPORT OF THE COUNTY MEDICAL OFFICER FOR THE YEAR 1934.

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### Natural and Social Conditions.

AREA.—The area of the County of Middlesex, inclusive of inland water, is 148,691 acres.

There are no county boroughs in Middlesex and the area of the administrative county coincides with that of the geographical county.

In February, 1934, the Ministry of Health issued the Middlesex Review Order, 1934, based upon the first general review of county districts undertaken by the County Council in accordance with Section 46 of the Local Government Act, 1930. This Order, which came into operation on 1st April, 1934, in addition to effecting a number of minor adjustments of boundaries between county districts, made sweeping changes in the constitution of several units of local government within the County. The alterations were as follows :—

- (a) A new Urban District of Harrow was created, comprising the Urban Districts of Harrow-on-the-Hill and Wealdstone, together with the Rural District of Hendon, the three last-named districts ceasing to exist as local government entities. The newly constituted Urban District of Harrow is the largest local sanitary area in the County.
- (b) The Urban District of Wembley was enlarged by the inclusion of the Urban District of Kingsbury, which was abolished as a separate sanitary area.
- (c) The Rural District of South Mimms was given urban district powers and renamed the Urban District of Potters Bar.

No rural districts, therefore, now remain in the County.

In October, 1934, a charter of incorporation was granted to the Urban District of Tottenham.

At the close of the year there were in the County 29 separate sanitary areas, as follows :—

- 12 municipal boroughs, with an area of 52,842 acres.
- 17 urban districts with an area of 95,849 acres.

POPULATION.—In all my Annual Reports of recent years attention has been called to the extraordinary manner in which the population of Middlesex continues to increase. The Registrar-General's estimate of the population of the County at mid-1934 was 1,810,200, an increase of 53,380 persons over the figure for the previous year.



The following table gives statistical information regarding the distribution of acreage and population within the administrative county and takes into account the adjustments resulting from the Middlesex Review Order, 1934 :—

POPULATION.

Districts.	Acreage.	Census Population.		Censal Increase or Decrease, 1921-1931.				Estimated by Registrar-General, mid-1934
		1921.	1931.	Persons.		Percentage.		
				In-crease.	De-crease.	In-crease.	De-crease.	
Acton ( <i>Borough</i> ) ... ..	2,318	60,817	70,008	9,191	—	15·1	—	69,343
Brentford and Chiswick ( <i>Borough</i> )	2,333	58,499	63,217	4,718	—	8·1	—	62,926
Ealing ( <i>Borough</i> ) ... ..	8,711	90,232	116,678	26,446	—	29·3	—	133,446
Edmonton ... ..	3,896	66,807	77,658	10,851	—	16·2	—	91,310
Enfield ... ..	12,401	60,464	67,752	7,288	—	12·1	—	74,625
Feltham ... ..	4,928	11,388	16,060	4,672	—	41·0	—	20,751
Finchley ( <i>Borough</i> ) ... ..	3,486	46,637	59,077	12,440	—	26·7	—	61,692
Friern Barnet ... ..	1,329	17,128	22,751	5,623	—	32·8	—	24,147
Hampton ... ..	2,043	10,675	13,061	2,386	—	22·4	—	13,530
Hampton Wick ... ..	1,306	3,265	2,960	—	305	—	9·3	2,960
Harrow ... ..	12,559	49,020	96,656	47,636	—	97·2	—	132,049
Hayes and Harlington ... ..	5,160	9,042	22,969	13,927	—	154·0	—	29,471
Hendon ( <i>Borough</i> ) ... ..	10,373	57,566	115,640	58,074	—	100·9	—	131,070
Heston and Isleworth ( <i>Borough</i> ) ...	7,219	47,463	76,254	28,791	—	60·7	—	87,797
Hornsey ( <i>Borough</i> ) ... ..	2,872	87,632	95,416	7,784	—	8·9	—	95,271
Potters Bar ... ..	6,129	3,222	5,720	2,498	—	77·5	—	8,570
Ruislip-Northwood ... ..	6,583	9,112	16,035	6,923	—	76·0	—	21,202
Southall-Norwood ... ..	2,606	30,165	38,839	8,674	—	28·8	—	46,680
Southgate ( <i>Borough</i> ) ... ..	3,763	39,525	56,063	16,538	—	41·8	—	60,093
Staines ... ..	8,273	17,060	21,336	4,276	—	25·1	—	25,115
Sunbury... ..	5,613	9,908	13,455	3,547	—	35·8	—	14,519
Teddington ... ..	1,214	21,213	23,369	2,156	—	10·2	—	23,050
Tottenham ( <i>Borough</i> ) ... ..	3,013	146,726	157,667	10,941	—	7·5	—	152,672
Twickenham ( <i>Borough</i> ) ... ..	2,442	34,795	39,909	5,114	—	14·7	—	43,477
Uxbridge ... ..	10,240	20,626	31,887	11,261	—	54·6	—	35,458
Wembley ... ..	6,292	18,239	65,799	47,560	—	260·8	—	92,160
Willesden ( <i>Borough</i> ) ... ..	4,705	165,822	185,118	19,296	—	11·6	—	188,286
Wood Green ( <i>Borough</i> ) ... ..	1,607	50,791	54,308	3,517	—	6·9	—	53,780
Yiewsley and West Drayton ...	5,277	9,163	13,066	3,903	—	42·6	—	14,750
The County ... ..	148,691	1,253,002	1,638,728	385,726	—	30·8	—	1,810,200

The changes brought about by the Middlesex Review Order, 1934, have introduced some complications in the calculation of the Registrar-General's statistical figures for the year.

The statistics of births, deaths and notifiable diseases supplied by the Registrar-General for the year 1934 in respect of the areas where these changes occurred are, therefore, composite figures, combining the records of the former areas for the whole year and the records of the transferred portions of the areas for the part of the year subsequent to the date of change.

To take account of the fact that these records do not wholly relate to the entire year, a population figure for calculating rates has been supplied for each district, and is shown in the annexed table.



DISTRICTS.	Population (adjusted for calculating rates).	DISTRICTS.	Population (adjusted for calculating rates).
Acton ( <i>Borough</i> ) .. ..	69,472	Potters Bar .. ..	8,570
Brentford and Chiswick ( <i>Borough</i> ) .. ..	62,777	Ruislip-Northwood .. ..	21,204
Ealing ( <i>Borough</i> ) .. ..	133,947	Southall-Norwood .. ..	46,693
Edmonton .. ..	91,310	Southgate ( <i>Borough</i> ) .. ..	59,997
Enfield .. ..	74,664	Staines .. ..	25,081
Feltham .. ..	20,828	Sunbury .. ..	14,482
Finchley ( <i>Borough</i> ) .. ..	61,679	Teddington .. ..	23,050
Friern Barnet .. ..	24,180	Tottenham ( <i>Borough</i> ) .. ..	152,694
Hampton .. ..	13,530	Twickenham ( <i>Borough</i> ) .. ..	43,450
Hampton Wick .. ..	2,960	Uxbridge .. ..	35,456
*Harrow-on-the-Hill .. ..	8,510	*Wealdstone .. ..	7,670
†Harrow .. ..	115,919	‡Wembley .. ..	91,925
Hayes and Harlington .. ..	29,721	Willesden ( <i>Borough</i> ) .. ..	187,990
Hendon ( <i>Borough</i> ) .. ..	131,075	Wood Green ( <i>Borough</i> ) .. ..	53,755
Heston and Isleworth ( <i>Borough</i> )	87,555	Yiewsley and West Drayton	14,750
Hornsey ( <i>Borough</i> ) .. ..	95,306	The County .. ..	1,810,200

\* Relates to first quarter of 1934 only.  
† Relates to new Harrow Urban District (as constituted after 31st March, 1934) for whole of year 1934, except Harrow-on-the-Hill and Wealdstone for period before 1st April, 1934.  
‡ Includes old Kingsbury area.

N.B.—It is to be noted that statistics for the old Kingsbury Urban District for the portion of the year before the change are included in those for Wembley for the whole of the year, since its area was wholly absorbed. In the case of the old districts of Harrow-on-the-Hill and Wealdstone, the statistics are kept separate, since the new Harrow Urban District did not take over the whole of these areas ; while as regards the old Hendon Rural District, since it was completely transferred to the new Harrow Urban District, its figures for the first quarter are included in that district.

In the tables which follow, the rates for England and Wales, given provisionally by the Registrar-General and included for purposes of comparison with those for Middlesex, have been calculated on a population estimated to the middle of 1934, but those for London and the great towns have been based on populations estimated to the middle of 1933.

BIRTHS AND BIRTH-RATES.—The corrected number of births belonging to the County and occurring during 1934 was 26,376 (13,514 males and 12,862 females). This number is equivalent to a birth-rate of 14·6 per 1,000 of the population. The number of illegitimate births registered was 955 (520 males and 435 females), representing an illegitimate birth-rate of 0·53 per 1,000 of the population. The ratio of legitimate to illegitimate births is 27·6 to one.

The following table gives the birth statistics for the last five years for Middlesex, London, the Great Towns, and England and Wales :—

Year.	The County.		London.	Great Towns.	England and Wales.
	Births.	Rate per 1,000 living.	Rate per 1,000 living.	Rate per 1,000 living.	Rate per 1,000 living.
1930 .. ..	24,840	15·9	15·7	16·6	16·3
1931 .. ..	25,507	15·5	15·0	16·0	15·8
1932 .. ..	25,437	14·9	14·2	15·4	15·3
1933 .. ..	24,501	13·9	13·2	14·4	14·4
1934 .. ..	26,376	14·6	13·2	14·7	14·8

The birth-rate for the County for 1934, which is 0·7 per thousand of the population higher than that for the previous year, has given a slight check to the almost continuously steady fall in birth-rate which has been experienced for many years. The birth-rates for the country as a whole and for the great towns (not London) also show a slight increase above those for the year 1933, which were the lowest which had ever been recorded.

Particulars of the number of births and birth-rates in each sanitary district of the County are set out in the table which follows, the districts being arranged in descending order of magnitude of the birth-rate.

The corresponding birth-rates for the previous year are shown in brackets, and it will be observed that an increased rate has been recorded in over two-thirds of the individual districts making up the County.

BIRTHS AND BIRTH-RATES IN EACH DISTRICT, 1934.

DISTRICTS.	Net number.	Rate per 1,000 living.	DISTRICTS.	Net number.	Rate per 1,000 living.
Feltham .. .. .	463	22·2 (16·8)	Willesden ( <i>Borough</i> ) ..	2,827	15·0 (14·6)
Hayes and Harlington ..	593	20·0 (18·5)	Twickenham ( <i>Borough</i> ) ..	629	14·5 (14·2)
Uxbridge .. .. .	706	19·9 (17·4)	Enfield .. .. .	1,086	14·5 (14·4)
Staines .. .. .	469	18·7 (15·8)	Teddington .. .. .	325	14·1 (12·8)
Sunbury .. .. .	263	18·2 (15·1)	Hampton .. .. .	188	13·9 (13·1)
Yiewsley and West Dray- ton .. .. .	268	18·2 (19·2)	Tottenham ( <i>Borough</i> ) ..	2,091	13·7 (13·8)
Wealdstone .. .. .	136	*17·7 (†17·9)	Acton ( <i>Borough</i> ) .. ..	943	13·6 (12·6)
Wembley .. .. .	1,554	‡16·9 (§14·1)	Harrow-on-the-Hill ..	115	*13·5 (¶12·4)
Edmonton .. .. .	1,523	16·7 (16·1)	Brentford and Chiswick ( <i>Borough</i> ) .. .. .	784	12·5 (13·4)
Harrow .. .. .	1,916	16·5 (¶12·4)	Hendon ( <i>Borough</i> ) ..	1,643	12·5 (13·1)
Potters Bar .. .. .	140	16·3 (15·8)	Friern Barnet .. .. .	293	12·1 (12·5)
Southall-Norwood ..	759	16·3 (15·7)	Finchley ( <i>Borough</i> ) ..	712	11·5 (11·0)
Ruislip-Northwood ..	339	16·0 (13·9)	Hornsey ( <i>Borough</i> ) ..	1,055	11·1 (10·8)
Heston and Isleworth ( <i>Borough</i> ) .. .. .	1,319	15·1 (16·3)	Southgate ( <i>Borough</i> ) ..	640	10·7 (9·7)
Ealing ( <i>Borough</i> ).. ..	2,006	15·0 (12·7)	Wood Green ( <i>Borough</i> ) ..	564	10·5 (11·1)
			Hampton Wick .. ..	27	9·1 (9·9)

¶ Relates to old Harrow District.  
|| Relates to new Harrow District.  
\* Relates to births for first quarter, 1934, only.  
† Relates to old Wealdstone District.  
‡ Relates to new Wembley District.  
§ Relates to old Wembley District.

Endeavour has been made to ascertain to what extent women in Middlesex are seeking institutional accommodation for their confinements. The following figures, although probably not complete, afford information as to the number of births belonging to Middlesex which have been ascertained as taking place in hospitals, and are of some interest.

BIRTHS OCCURRING IN HOSPITALS, 1934.

Hospitals.	Number of Births.
<i>Middlesex County Hospitals, &amp;c.—</i>	
North Middlesex County Hospital .. .. .	1,415
Central Middlesex County Hospital .. .. .	626
West Middlesex County Hospital .. .. .	742
Redhill County Hospital .. .. .	464
Hillingdon County Hospital .. .. .	242
Staines Institution .. .. .	19
	— 3,508
<i>Other County Hospitals—</i>	
Hertfordshire .. .. .	236
London .. .. .	11
	— 247
<i>Municipal Maternity Hospitals—</i>	
Chiswick and Ealing .. .. .	520
Willesden .. .. .	556
	— 1,076
<i>Voluntary Hospitals—</i>	
Queen Charlotte's Hospital .. .. .	702
City of London Maternity Hospital .. .. .	179
Salvation Army Mothers' Hospital .. .. .	228
Royal Northern Hospital .. .. .	185
Queen Mary's Maternity Hospital .. .. .	207
Other voluntary hospitals .. .. .	83
	— 1,584
Total .. .. .	— 6,415



The number of births occurring in hospitals (6,415) represents nearly 25 per cent. of the total Middlesex births which occurred during 1934. The number of births which took place in private nursing homes amounted to 2,603, or 10 per cent. of the total (see page 43). In over one-third of cases, therefore, women sought institutional accommodation of one kind or another for their confinements.

In addition to the cases delivered by them in nursing homes (399 or 1·5 per cent.), certified midwives attended the confinements of 8,176 women in the patient's own homes, representing 31 per cent. of the total.

STILL-BIRTHS.—The number of still-births registered in 1934 was 884, equivalent to a rate of 32·4 per 1,000 total births, or 0·49 still-births per 1,000 population, as compared with a rate of 0·62 for the whole country.

DEATHS AND DEATH-RATES (ALL CAUSES).—The corrected number of deaths belonging to the County occurring during 1934 was 17,367, or 301 more than occurred in the course of the previous year. This corresponds to a death-rate of 9·6 per 1,000 persons living, as compared with 9·7 in 1933.

The figures for the last five years relating to Middlesex, London, the Great Towns and England and Wales as a whole are as follows :—

Year.	The County.		London.	Great Towns.	England and Wales.
	Deaths.	Rate per 1,000 living.	Rate per 1,000 living.	Rate per 1,000 living.	Rate per 1,000 living.
1930 .. .. .	14,658	9·4	11·4	11·5	11·4
1931 .. .. .	16,008	9·8	12·4	12·3	12·3
1932 .. .. .	16,516	9·7	12·3	11·8	12·0
1933 .. .. .	17,066	9·7	12·2	12·2	12·3
1934 .. .. .	17,367	9·6	11·9	11·8	11·8

Among the principal factors influencing the death-rate of an area are :—firstly, the healthiness of the area and, secondly, the age- and sex-distribution of the population. It is apparent that, other things being equal, an area having a population composed in the main of elderly people will tend to have a higher death-rate than one peopled, for the most part, by young adults. As result of calculations, based upon the census of 1931, the Registrar-General has been able to show that the relatively low death-rate consistently experienced in Middlesex is due in some degree to the favourable age-distribution of the population. As might be expected in a rapidly developing area, the population contains rather more than its quota of young people as compared with the country as a whole. In order that the death-rates of the County, and of the districts comprising the County, may be advantageously compared one with another and with those of other parts of the country, the Registrar-General has supplied for the county and for each individual district a figure known as the “comparability factor” which takes into account the age and sex-distribution of the population of each district. The product of the crude death-rate and the comparability factor provides an adjusted death-rate, in which differences in constitutions of populations are eliminated, and which may properly be used as a basis of comparison of healthiness between one area and another.

The effect of applying the comparability factor to the crude death-rate of the whole county is to raise the rate from one of 9·6 to 10·3. The death-rate for England and Wales is 11·8. After making full allowance, therefore, for the advantages Middlesex enjoys by virtue of its comparatively youthful population, there still remains a considerable balance in the County's favour which may reasonably be taken as an indication of the relative healthiness of Middlesex.

The following table gives information of the death-rate, both crude and adjusted, in each of the sanitary districts of the County.

DEATHS AND DEATH-RATES IN EACH DISTRICT, 1934.

Districts.	Under 1 year of age.		At all ages.			
	No.	Rate per 1,000 births.	No.	Crude Rate per 1,000 living.	Com- parability Factor.	Adjusted Rate per 1,000 living.
Acton ( <i>Borough</i> ) .. .. .	39	41	726	10·5	{*1·07 †1·08	11·2 11·3
Brentford and Chiswick ( <i>Borough</i> )	48	61	700	11·2	1·02	11·4
Ealing ( <i>Borough</i> ) .. .. .	77	38	1,267	9·5	1·01	9·6
Edmonton .. .. .	74	49	837	9·2	1·07	9·8
Enfield .. .. .	47	43	720	9·6	1·02	9·8
Feltham .. .. .	25	54	198	9·5	{*1·13 †1·14	10·7 10·8
Finchley ( <i>Borough</i> ) .. .. .	42	59	658	10·7	0·98	10·5
Friern Barnet .. .. .	11	38	205	8·5	{*0·99 †0·98	8·4 8·3
Hampton .. .. .	10	53	134	9·9	0·96	9·5
Hampton Wick .. .. .	3	111	38	12·8	0·95	12·2
Harrow-on-the-Hill .. .. .	8	70	105	12·3	1·07	13·2
Harrow .. .. .	87	45	891	7·7	1·17	9·0
Hayes and Harlington .. .. .	31	52	217	7·3	{*1·35 †1·36	9·9 9·9
Hendon ( <i>Borough</i> ) .. .. .	71	43	1,065	8·1	1·18	9·6
Heston and Isleworth ( <i>Borough</i> ) ..	63	48	863	9·9	1·05	10·4
Hornsey ( <i>Borough</i> ) .. .. .	40	38	1,114	11·7	{*0·92 †0·91	10·8 10·6
Potters Bar .. .. .	8	57	81	9·5	1·05	10·0
Ruislip-Northwood .. .. .	4	12	155	7·3	1·10	8·0
Southall-Norwood .. .. .	35	46	350	7·5	1·14	8·5
Southgate ( <i>Borough</i> ) .. .. .	25	39	596	9·9	0·98	9·7
Staines .. .. .	19	41	235	9·4	0·95	8·9
Sunbury .. .. .	14	53	164	11·3	1·00	11·3
Teddington .. .. .	11	34	237	10·3	0·98	10·1
Tottenham ( <i>Borough</i> ) .. .. .	109	52	1,573	10·3	1·13	11·6
Twickenham ( <i>Borough</i> ) .. .. .	41	65	491	11·3	1·02	11·5
Uxbridge .. .. .	38	54	338	9·5	1·08	10·3
Wealdstone .. .. .	7	51	80	10·4	1·25	13·0
Wembley .. .. .	62	40	681	7·4	{*1·21 †1·26	9·0 9·3
Willesden ( <i>Borough</i> ) .. .. .	120	42	1,954	10·4	1·09	11·3
Wood Green ( <i>Borough</i> ) .. .. .	21	37	562	10·5	1·01	10·6
Yiewsley and West Drayton .. .. .	11	41	132	8·9	1·17	10·4
The County .. .. .	1,201	45·5	17,367	9·6	1·07	10·3

\* Before change of boundary, 1st April, 1934.

† After change of boundary, 1st April, 1934.

The five principal conditions contributing to the death-rate, which together are responsible for more than half the total deaths, are set out below. The order of their influence upon the death-rate has remained fairly constant for a number of years :—

Condition.	1930.	1931.	1932.	1933.	1934.
Heart disease .. .. .	1·91	2·16	2·18	2·16	2·22
Cancer .. .. .	1·28	1·36	1·33	1·37	1·37
Tuberculosis (all forms) .. .. .	0·75	0·71	0·67	0·70	0·70
Pneumonia (all forms) .. .. .	0·58	0·68	0·61	0·64	0·62
Cerebral hæmorrhage, &c. .. .. .	0·49	0·46	0·43	0·43	0·43

Deaths from suicide numbered 241 for the year, corresponding to a death-rate of 0·13 per 1,000 persons living. Information regarding deaths from suicide during the past five years may be summarized as follows :—

Year.	No. of suicides.	No. of suicides per million of the population.
1930 .. .. .	187	119
1931 .. .. .	198	120
1932 .. .. .	250	145
1933 .. .. .	246	140
1934 .. .. .	241	133

In 1932, the year immediately following the national financial crisis, there was a sudden sharp rise (a rise of 20 per cent.) in the death-rate due to suicide. During the past two years suicides have been rather less numerous and the rate has been slowly falling. It is to be hoped that this falling rate, together with the slight rise in the birth-rate, may be reflections of returning prosperity.

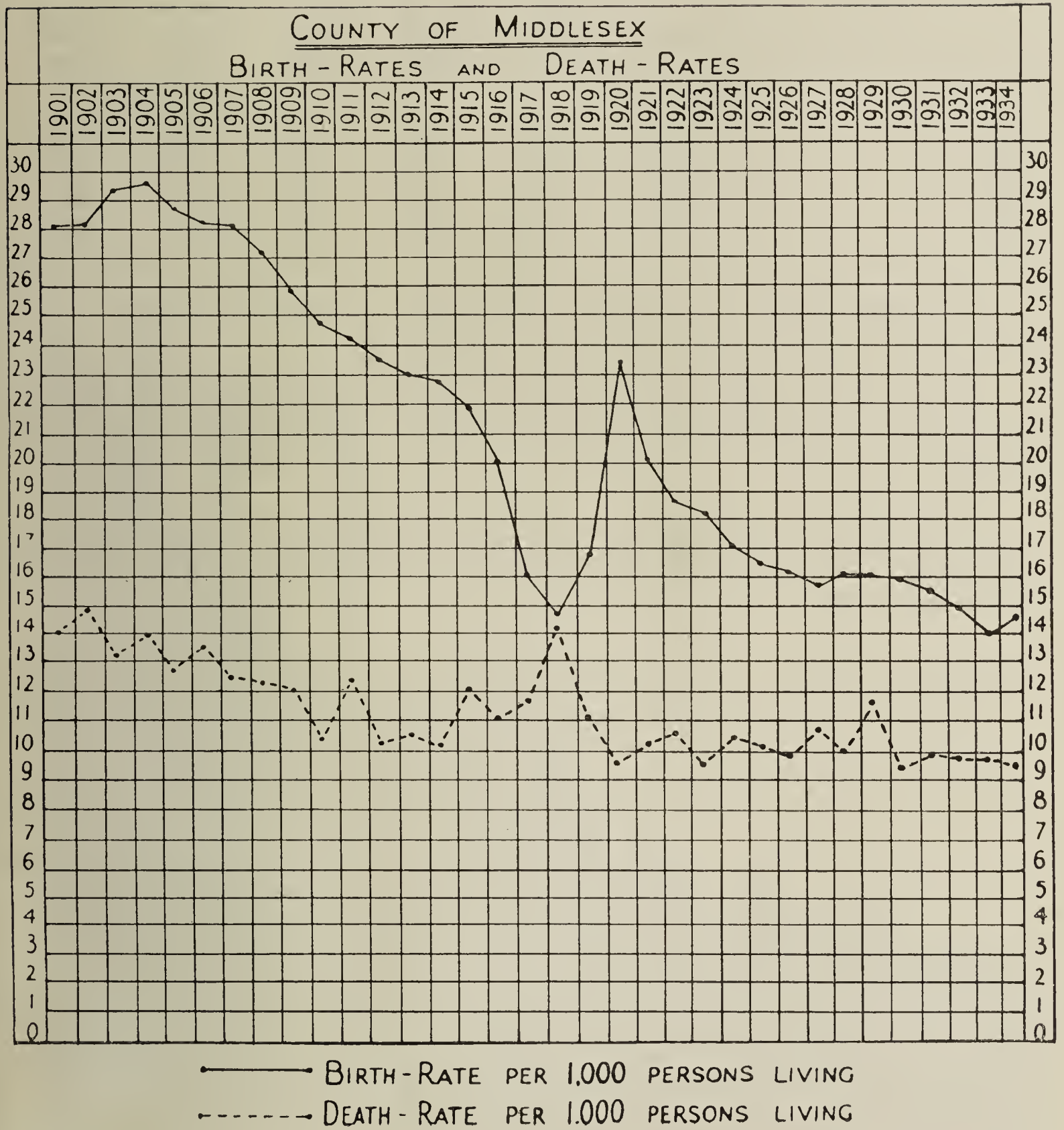
On page 9 appears a graph illustrating the changes in birth- and death-rates since the commencement of the present century. The approximation of the two curves, one to another, and the comparatively stationary condition of the death-rate during recent years, are well shown.



Detailed information as to the different diseases which contributed towards the total number of deaths and the age-groups in which these deaths occurred is given in the following table :—

CAUSES OF DEATH AT DIFFERENT PERIODS OF LIFE IN THE ADMINISTRATIVE  
COUNTY OF MIDDLESEX, 1934.

Causes of Death.	All Ages.	0—	1—	2—	5—	15—	25—	35—	45—	55—	65—	75—
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1. Typhoid and Paratyphoid fevers .. .. .	6	—	—	—	—	1	1	1	1	—	2	—
2. Measles .. .. .	143	13	49	45	33	1	—	1	—	—	1	—
3. Scarlet fever .. .. .	40	1	4	7	23	2	1	2	—	—	—	—
4. Whooping cough .. .. .	63	25	18	15	5	—	—	—	—	—	—	—
5. Diphtheria .. .. .	108	1	6	37	58	2	1	—	1	—	2	—
6. Influenza .. .. .	193	9	3	5	5	6	8	24	30	31	37	35
7. Encephalitis lethargica .. .. .	16	—	—	—	—	1	2	3	2	4	3	1
8. Cerebro-spinal fever .. .. .	19	4	5	2	4	2	1	—	1	—	—	—
9. Tuberculosis of respira- tory system .. .. .	1,086	2	1	3	12	237	288	192	183	110	46	12
10. Other tuberculous diseases	180	7	14	24	31	35	23	16	8	14	5	3
11. Syphilis .. .. .	35	5	—	—	—	1	2	4	10	6	7	—
12. General paralysis of the insane, tabes dorsalis .. .. .	67	—	—	—	—	—	2	11	20	21	12	1
13. Cancer, malignant disease	2,476	1	1	1	7	13	45	171	410	671	686	470
14. Diabetes .. .. .	212	—	—	—	1	5	4	3	16	54	85	44
15. Cerebral hæmorrhage, &c.	777	—	—	—	—	—	4	19	58	141	263	292
16. Heart disease .. .. .	4,015	—	—	4	23	44	83	113	271	644	1,147	1,686
17. Aneurysm .. .. .	72	—	—	—	—	2	4	2	13	17	28	6
18. Other circulatory diseases	853	1	—	1	1	1	1	4	48	151	283	362
19. Bronchitis .. .. .	534	32	6	3	1	4	4	10	29	70	120	255
20. Pneumonia (all forms) .. .. .	1,123	176	67	37	20	24	45	91	120	167	182	194
21. Other respiratory diseases	198	3	1	3	6	7	12	16	38	32	42	38
22. Peptic ulcer .. .. .	218	—	—	—	—	1	14	23	48	65	45	22
23. Diarrhœa, &c. .. .. .	152	93	10	5	3	4	8	7	4	6	7	5
24. Appendicitis .. .. .	140	—	1	8	23	11	17	16	19	22	17	6
25. Cirrhosis of liver .. .. .	65	—	—	—	1	1	2	3	14	17	20	7
26. Other diseases of liver, &c.	71	1	—	—	—	2	3	3	13	16	17	16
27. Other digestive diseases..	405	28	2	19	23	19	29	33	45	73	63	71
28. Acute and chronic nephritis .. .. .	486	2	—	2	12	17	23	37	62	100	140	91
29. Puerperal sepsis .. .. .	46	—	—	—	—	2	36	8	—	—	—	—
30. Other puerperal causes .. .. .	49	—	—	—	—	10	25	14	—	—	—	—
31. Congenital debility, pre- mature birth, malforma- tions, &c... .. .	695	683	4	4	—	1	2	—	1	—	—	—
32. Senility .. .. .	367	—	—	—	—	—	—	—	—	5	59	303
33. Suicide .. .. .	241	—	—	—	—	12	35	42	67	52	21	12
34. Other violence .. .. .	686	28	12	17	73	92	72	44	61	74	82	131
35. Other defined diseases .. .. .	1,515	85	19	25	96	69	109	129	204	247	294	238
36. Causes ill-defined, or un- known .. .. .	15	1	—	—	—	—	2	—	—	2	5	5
All causes .. .. .	17,367	1,201	223	267	461	629	908	1,042	1,797	2,812	3,721	4,306



INFANTILE MORTALITY.—The number of deaths during 1934 of infants under one year of age was 1,201, equivalent to an infantile mortality rate of 45·5 per 1,000 births. This figure is the lowest ever recorded for Middlesex and, as in previous years, is well below the average for the rest of the country.

Year.	The County.			London.	Great Towns.	England and Wales.
	Births.	Deaths under 1 year.	Rate per 1,000 births.	Rate per 1,000 births.	Rate per 1,000 births.	Rate per 1,000 births.
1930 .. .. .	24,840	1,190	48	59	64	60
1931 .. .. .	25,507	1,267	50	65	71	66
1932 .. .. .	25,437	1,285	50·5	66	69	65
1933 .. .. .	24,501	1,172	48	59	67	64
1934 .. .. .	26,376	1,201	45·5	67	63	59

(The infantile mortality rate for that area of the County for which the County Council is the maternity and child welfare authority was 46 per 1,000 births.)

In spite of the very hot and prolonged summer, diarrhœa accounted for no more than 7·7 per cent. (93 cases) of the infantile deaths, which is somewhat lower than the average figure during the past few years. Respiratory diseases (pneumonia, bronchitis and influenza) were responsible for 217 infant deaths (18·1 per cent.), while 683 (56·9 per cent.) were due to congenital or developmental conditions.

Information as to the number of deaths of infants and the infantile mortality rate in each sanitary district in the County is given in the table on page 6, and on page 11 appears a diagram illustrating the variations which have occurred in the infantile mortality rate in Middlesex since the beginning of the present century.

MATERNAL MORTALITY.—During the year 95 deaths of women occurred from causes connected with pregnancy and childbirth, corresponding to a maternal mortality rate of 3·60 per 1,000 live births.

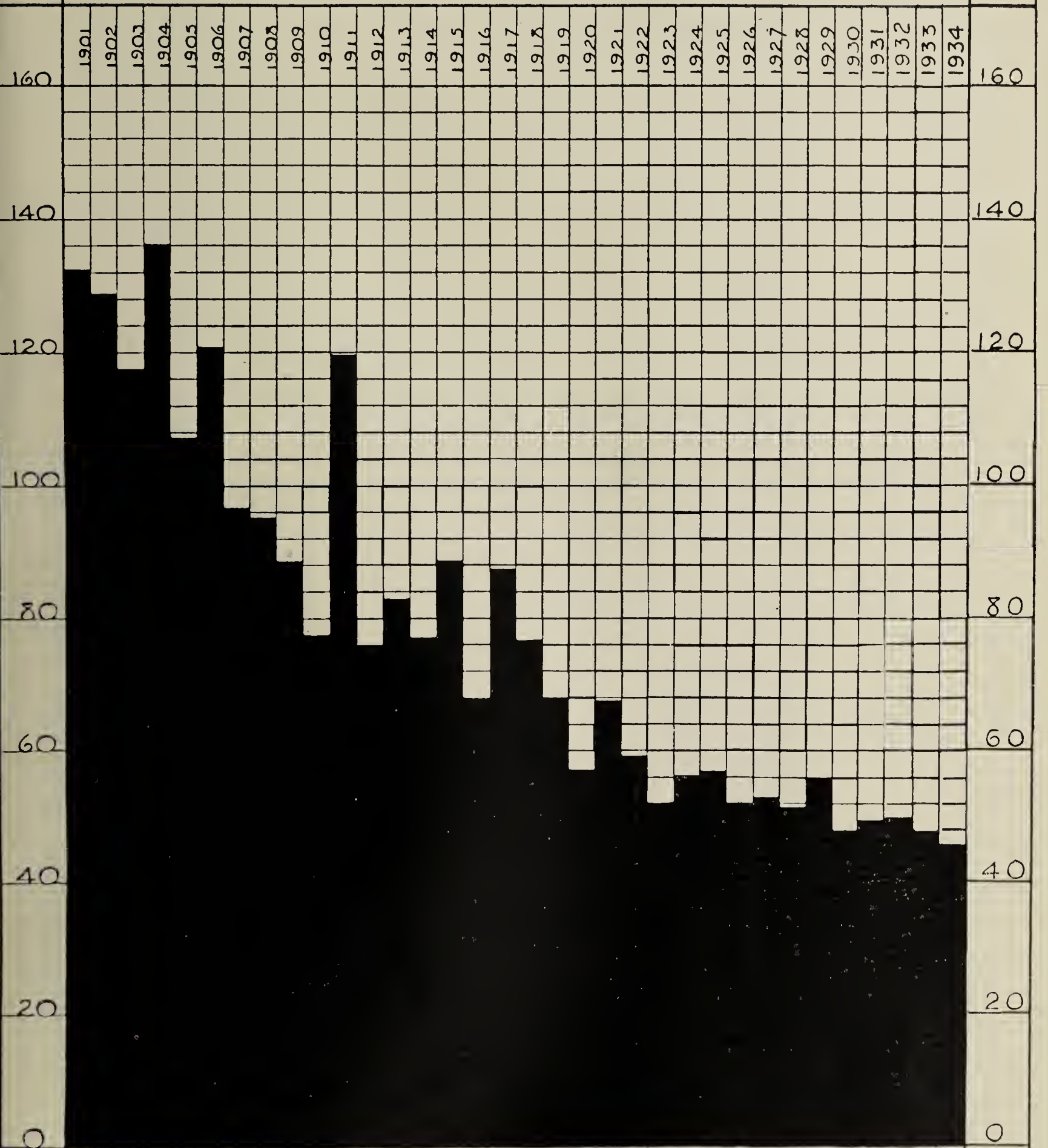
This rate is considerably lower than that (4·77) experienced in 1933, when for some reason an unusually and unexpectedly high rate obtained. The figure for 1934 (3·60), although still leaving a good deal to be desired, approximates more closely to the average rates which have been recorded in Middlesex during recent years and, as is usually the case, is very considerably lower than the maternal mortality rate of the country as a whole (4·60).

Maternal deaths are classified by the Registrar-General into two principal groups: those due to puerperal sepsis and those due to other accidents and diseases of pregnancy and parturition.

The following table gives information as to maternal deaths, classified in these two categories, during the past five years :—



COUNTY OF MIDDLESEX  
INFANTILE MORTALITY



PROPORTION OF DEATHS UNDER 1 YEAR  
OF AGE PER 1000 BIRTHS

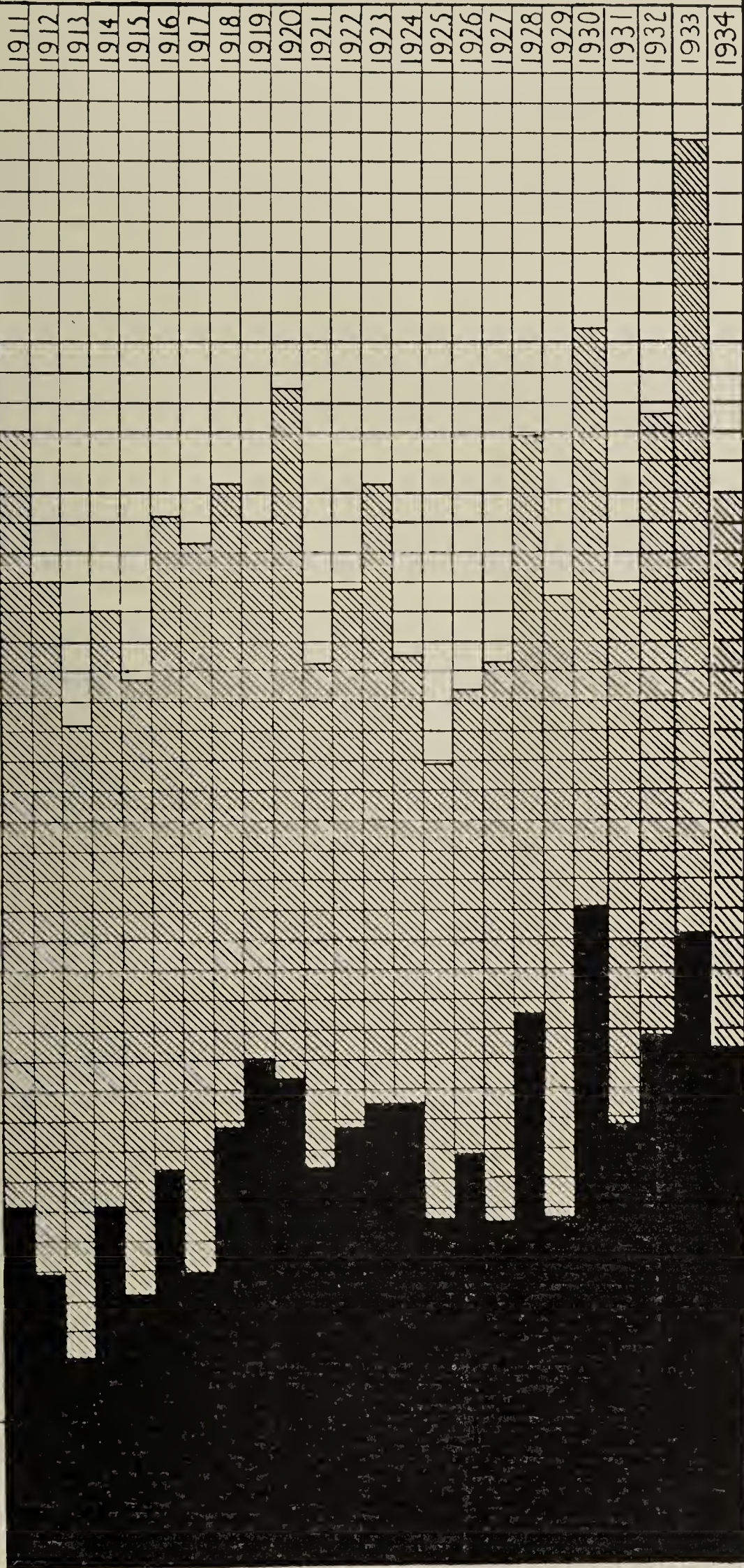
Year.	Puerperal sepsis.		Other accidents and diseases of pregnancy and parturition.		Total.	
	Number of deaths.	Rate per 1,000 births.	Number of deaths.	Rate per 1,000 births.	Maternal deaths.	Maternal mortality rate.
1930 .. .. .	55	2·21	48	1·93	103	4·15
1931 .. .. .	38	1·49	46	1·80	84	3·29
1932 .. .. .	45	1·77	53	2·08	98	3·85
1933 .. .. .	52	2·12	65	2·65	117	4·77
1934 .. .. .	46	1·74	49	1·86	95	3·60

The maternal mortality rate for the whole country for 1934 is 4·60 per 1,000 live births (puerperal sepsis 2·03), which is the highest maternal mortality rate recorded for England and Wales for over 30 years.

On page 13 appears a diagram illustrating the variations which have taken place in the maternal mortality rate in Middlesex since the year 1911, and on page 14 is a graph indicating, year by year, the maternal mortality rates for Middlesex and comparing them with the corresponding rates for the whole of England and Wales.



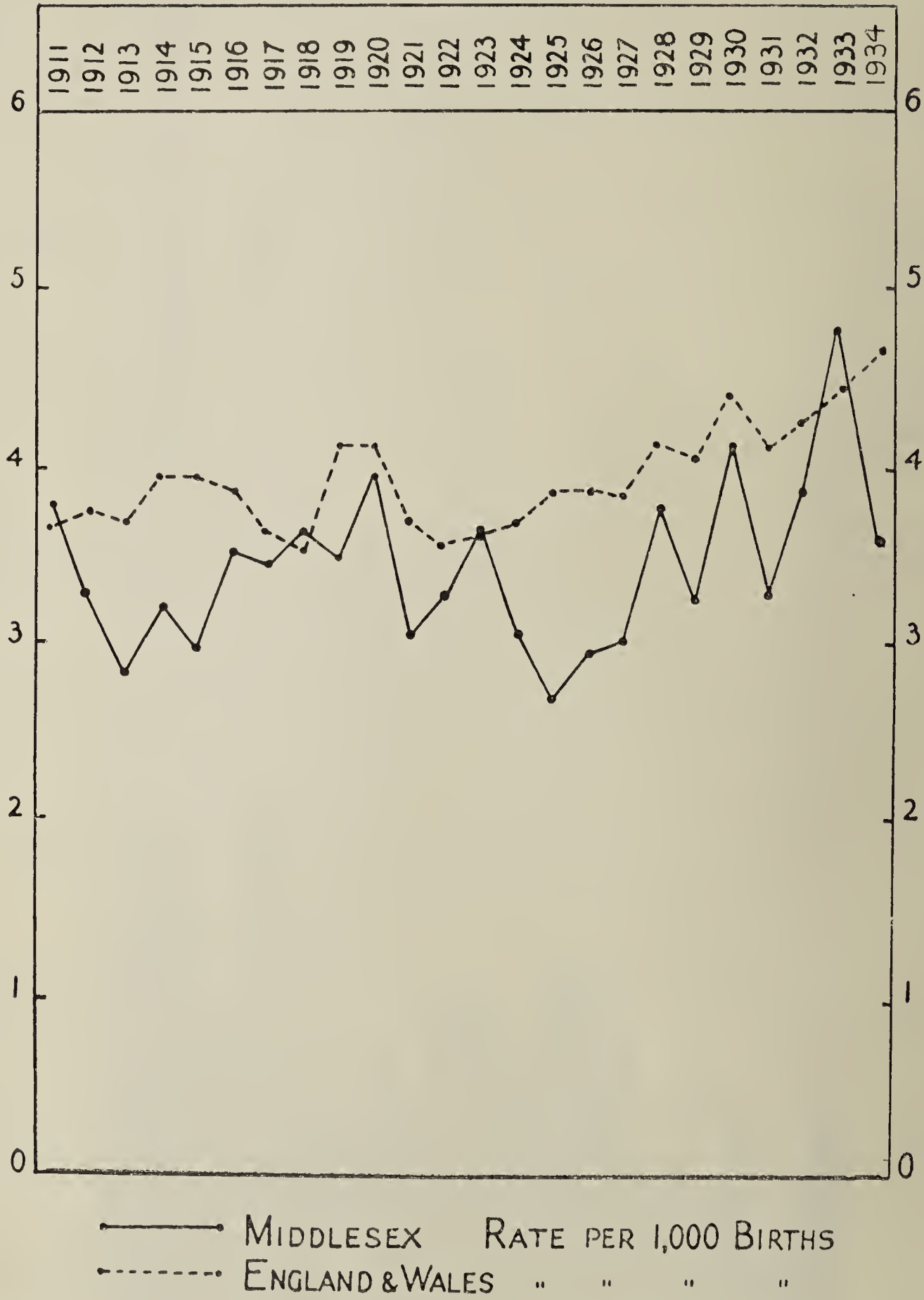
COUNTY OF MIDDLESEX  
♦ MATERNAL MORTALITY ♦



▨ TOTAL MATERNAL MORTALITY RATE PER 1000 BIRTHS.  
■ PUERPERAL SEPSIS MORTALITY RATE PER 1000 BIRTHS



MATERNAL MORTALITY



## Institutional Medical Services transferred to the County Council under the provisions of the Local Government Act, 1929.

The year 1934 has been memorable on account of the problems of major interest which have engaged the attention of the County Council in connection with the treatment of the sick. The importance of the decisions reached is such that I propose to deal chiefly with these, and (although steady progress in modernization and extension of all the hospitals has continued) to refer somewhat briefly to detailed matters relating to individual hospitals and institutions.

The Middlesex (Public Assistance) Scheme, 1929, declared that it was the intention of the Council, as soon as practicable, to take the necessary steps to ensure that any assistance which could be provided either by way of Poor Relief or by virtue of any other "Special Acts" should be provided by way of the appropriate Act and not by way of Poor Relief. In so far as the institutional treatment of the sick was concerned, the Public Health and Public Assistance Committee were in favour of carrying the Council's policy into effect by means of the provisions of Section 5 (1) of the Local Government Act, 1929, which authorized the appropriation of the County hospitals as hospitals under the Public Health Acts. The subject of this appropriation has been under consideration by the Public Health and Public Assistance Committee and by the Council on a number of occasions and various factors, especially the relatively limited extent of the Council's accommodation, have resulted in postponement of any definite decision as to the suitable date for appropriation to be effected. In April, 1934, however, the County Council, after further consideration of the subject, passed the following resolution :—

"That, subject to the consent of the Minister of Health, the undermentioned Poor Law establishments be appropriated, in accordance with the provisions of Section 53 (2) of the Local Government Act, 1929, for the reception and treatment of the sick under the Public Health Acts as from the 1st April, 1936, or such later date as may be approved by the Minister :—

Central Middlesex County Hospital.  
Edgbury Convalescent Home.  
Hillingdon County Hospital.  
North Middlesex County Hospital.  
Redhill County Hospital.  
West Middlesex County Hospital."

The effect of this resolution is far reaching and the decision marks a most important advance in the character of the social services provided by the Council. In view of the many issues involved by the decision, I reprint in Appendix VI the report of the Public Health and Public Assistance Committee, which was before the County Council when the resolution was decided upon.

The continued increase in the population of Middlesex, amounting as it does to an average of 1,000 persons a week, combined with the growing popularity of the County hospitals which the efficiency of the service provided by the County Council is producing, again have caused great pressure on the accommodation available. As in previous years, the large number of patients suffering from chronic illness provides a problem which can only be solved by very extensive additions to the hospitals now possessed by the Council, and the policy of the Council which has approved the transfer to other establishments of all able-bodied persons from institutions adjoining hospitals, and the utilization of the buildings thus evacuated as hospitals for the reception of patients suffering from chronic illnesses, ultimately should materially assist in relieving the present pressure on beds for cases of acute illness and at the same time provide for the less acute and chronically sick institutional accommodation under direct medical control. Reference to the table on page 29 will show that the total number of admissions to the County hospitals during the year under review was 1,693 greater than in 1933, but this result was only obtainable by shortening the length of stay of patients below what is desirable and by overcrowding the wards during the winter months.

In furtherance of the policy outlined above, progress was made during the year with the scheme for obtaining possession of Percy House Schools from H.M. Office of Works, to whom they had been leased by the late Guardians, and adapting them for the reception of able-bodied inmates from Warkworth House, thus rendering the latter available as a hospital for chronic sick. In July, application to the Ministry of Health for sanction of the proposal was approved by the Council and the necessary authorization was received. It is an integral part of the scheme that when Warkworth House becomes an establishment for the reception of sick persons only, it shall be transferred to the West Middlesex County Hospital and be under the direct supervision of the Medical Superintendent of that hospital. This suggestion also has been agreed to by the Ministry of Health.

In the northern part of the County, consideration was given to the future use of Edmonton House. In this connection the problem of alternative accommodation for the able-bodied at present housed in the institution received careful attention. In the district of Enfield are situated the extensive group of buildings transferred to the Council from the late Guardians and known as Chase Farm Schools. The County Council is averse to the housing of large numbers of children under institutional



conditions and for some time past has been engaged in providing scattered or grouped homes for the children under its care. This policy is leading to the gradual evacuation of Chase Farm Schools, and it was decided that this institution was capable of such alterations as would render it suitable for the accommodation of able-bodied adults. In October, therefore, the Council resolved :—

“ That, subject to the approval of the Minister of Health, the utilization of Edmonton House as a separate establishment for the reception and maintenance of the sick, as from the date upon which alternative arrangements are completed for the accommodation of the able-bodied inmates at present therein, and the adaptation of Chase Farm Schools for the latter purpose as soon as the children at present therein are evacuated, be approved.”

In October, 1932, the Ministry of Health approved the classification of Central Middlesex County Hospital as a hospital under the control of a Medical Superintendent, whereas previously it had been classified as an institution, the Medical Officer of which was graded as a “ Master.” The classification of the hospital as such, necessitated the removal of able-bodied inmates to other institutions and the provision for future persons in this category elsewhere than at Central Middlesex County Hospital. Numbers were transferred to Redhill Institution and Old Men’s Home, but further accommodation is required.

During 1934 some of the wards in the infirmary block of Redhill Institution became unsafe owing to settlement, and it was necessary to remove some 12 patients from these wards. The main portion of the block was erected in 1865, and, with subsequent additions, afforded accommodation for 59 patients, whilst on the same site a more modern semi-permanent ward block of 64 beds exists. The total accommodation for the chronically sick, however, is much below the requirements of the area, and the original infirmary block itself falls far short of affording suitable accommodation for sick persons.

In view of all these circumstances, it was decided the most satisfactory plan would be to erect within the grounds of Redhill County Hospital a new establishment for chronic sick patients which would form a part of Redhill County Hospital, under the control of the Medical Superintendent, and to reserve Redhill Institution for the reception of able-bodied persons from the whole of the central area of the County. This scheme, in addition to providing more suitably and amply for the chronic sick in the neighbourhood, would enable the remaining able-bodied in Central Middlesex County Hospital to be transferred, and would provide the additional accommodation for able-bodied which is necessary in this part of the County. The County Council approved the scheme in principle in January, and subsequently the Ministry of Health signified their agreement to the proposals.

Reference was made in last year’s report to the proposal to utilize the upper floors of the County Council’s tuberculosis dispensary at Hounslow as an institution for the accommodation of 19 bed-ridden patients selected from West Middlesex County Hospital and Warkworth House, and to the unfavourable view taken by the Ministry of Health to the scheme. Upon the installation of two fire escape staircases, the objection of the Ministry was withdrawn, and on 18th March, 1934, the beds were filled with female bed-ridden patients. It may be added that the patients are very happy in their new quarters, and, in order to avoid misunderstanding and confusion, the residential portion of the dispensary has been named the Bellgrove Home.

The County Council’s convalescent home for women at Edgbury has proved of the greatest utility, and has been fully occupied during the year. One of the wards, however, causes considerable discomfort to its occupants, owing to its construction. In winter it is impossible to maintain a reasonably warm temperature, and in summer the ward cannot be kept cool. There are also various other inconveniences, such as are to be expected in a building not planned for the purpose for which it is used. It was decided to investigate the practicability of rectifying these defects, and at the same time increasing the accommodation of the home. As a result, in July the County Council approved a scheme of alteration and extension which not only will effect very considerable improvement in the arrangements for administration of the home, but will materially add to the comfort of the patients, and at the same time provide a valuable increase of 30 beds.

Early in the year the Council had under consideration a proposal to acquire a property situated in the County near Uxbridge and known as Harefield Place. This property consisted of a large house situated in about 136 acres of land, and the intention of the Council was to adapt the house for the accommodation of aged women on the same lines as had proved so successful in the case of the adaptation of White Webbs, Enfield, as a home for aged but able-bodied men. Negotiations were carried out which resulted in the County Council acquiring the property, the house and grounds immediately surrounding it to be used for the purposes of the Public Health and Public Assistance Committee, and the remainder of the large site, which is of a very pleasing character, to be used as an open space, recreation ground, &c., under the control of the Uxbridge District Council.

It was early realized, however, that Harefield Place, whilst suitable for the purpose for which it had been acquired, possessed certain features which rendered it of greater value to the Council than had been fully appreciated. The house, facing south-west, is in rural surroundings, standing on high ground, with a wide and pleasing view from its windows ; the grounds and gardens provide pleasant and secluded walks, and the reservation of the adjoining portion of the estate as an open space ensures



the permanence of these conditions. All the chief rooms of the house, which are large and airy, face south, and the ground floor windows open on to a raised terrace. The existence of these amenities within the County itself, and therefore within easy distance by motor transport from any part thereof, suggested to the Council the desirability of re-considering the proposed user of the premises, and adapting the building as a country branch of the hospital service rather than as a home for aged and able-bodied. This proposal received the approval of the Ministry of Health, and marks a further development of the progressive policy the Council has adopted in its efforts to ensure that the sick for whom it is responsible are afforded every advantage that modern teaching can suggest. Harefield Place will provide accommodation to which suitable patients can be transferred from any of the County hospitals (if necessary, as stretcher cases), thus enabling them to receive the benefits of convalescent treatment in rural surroundings, under skilled medical and nursing supervision, long before they are well enough to undertake the journey to, or to take part in the normal routine of, an ordinary convalescent home. To a limited extent, Harefield Place, by permitting early removal of patients from hospitals, will also assist in relieving the great pressure on hospital beds which is experienced from time to time.

The past year has been noteworthy for the steps taken to ensure the highest possible degree of efficiency in the medical staffs at the County hospitals. Whilst it is evident that suitably planned hospitals are necessary both for the comfort of the patients and for convenience in administration, and that equipment should be adequate and include such additions as have resulted from modern research and experience, the efficiency of any hospital ultimately must rest on the skill and competence of the medical personnel employed therein. It is essential, therefore, that the conditions and remuneration of the Council's medical service should be such as to attract men and women of the highest qualifications and experience, and encourage them to remain in the Council's employment.

The scheme of grading adopted by the County Council in May, 1934, is set out below, and it will be noted that officers in Grade I and Grade II are given the opportunity of living away from the hospitals, so that the appointments may be attractive to senior and married men.

#### Grade I.—Senior Surgeons, Physicians or Obstetricians.

Salary : £850 per annum, rising by annual increments of £50 to £1,350 per annum, with an additional non-resident cash allowance of £150 per annum. No other emoluments.

In the event of the officer being married and suitable married quarters being available, he will be provided with such quarters, including light, water and heating, in lieu of the cash allowance. If the officer is single and desires to reside at the hospital, if suitable residential accommodation is available, he will be provided with full residential emoluments in lieu of the cash allowance.

#### Grade II.—Surgeons, Physicians or Obstetricians.

Salary : £500 per annum, rising by annual increments of £50 to £750 per annum, with an additional non-resident cash allowance of £150 per annum, but would be provided with quarters or residential emoluments under the same conditions as in the case of Grade I officers.

After eight years' service in this grade two additional annual increments of salary of £50 each will be allowable.

#### Assistant Medical Officers.

Salary : £400 per annum, rising by annual increments of £25 to £475 per annum. All appointments in this grade will be during the pleasure of the Council, their engagements being determinable by one month's notice on either side. The appointment will also be subject to the condition that if not determined earlier, it will automatically terminate at the end of four years. In special cases at the expiration of this period such medical officers may, at the discretion of the House Committees and on passing the prescribed medical examination, be appointed on the established staff of the Council, in which event the salary will be increased to £500 per annum, which will be the maximum for an officer in this Grade.

Emoluments : Board, lodging and laundry valued at £100 per annum.

#### Deputy Medical Superintendents.

The Senior Assistant or Assistant Medical Officer who acts as Deputy Medical Superintendent and is appointed to this post will receive an additional £50 per annum.

#### Junior Assistant Medical Officers.

Salary : £250 per annum.

Emoluments : Board, lodging and laundry valued at £100 per annum. These officers will be employed in the first instance for a period not exceeding six months, the House Committees to have the power to authorize retention for an additional six months and if found satisfactory in all respects at the expiration of twelve months' service will be eligible, upon the recommendation of the Medical Superintendent, and subject to confirmation by the County Council, for promotion to the post of Assistant Medical Officer. If not so recommended they will leave the Council's Service.



As will be appreciated on reference to the appendices of this report, the Council's hospitals have to deal with very large numbers of most difficult and serious conditions, and in the larger hospitals the turnover of surgical work is greater than can be dealt with by a single individual, especially having regard to the necessity for providing for emergencies arising by day and night. The scheme of grading adopted by the Council provides for the appointment, where the extent of work justifies this, of both a senior and junior specialist, either surgeon, physician or obstetrician, so that at all times a highly-skilled officer will be available to deal with serious cases, and to supervise the work of the more junior members of the hospital staffs. The inclusion of a second grade, also, permits the appointment of a surgeon, physician or obstetrician of a high standard in the smaller hospitals where the extent of the work at present may not justify the engagement of an officer with so high a remuneration as is provided in the senior grade.

The subject of the provision of a pathological service in connection with the County Hospitals received special attention during 1934. It is difficult to over-emphasize the importance of pathological investigations in connection with the work of a modern hospital. The diagnosis of many conditions is based upon the results of such examinations, the determination of the nature of a tumour (whether malignant or benign), the identification of the exact nature of an anaemia, the recognition of the bacteria present in an inflammation, all are simple examples of the use of pathology in providing knowledge upon which appropriate treatment can be based. Treatment itself may be carried out by means of pathological products such as vaccines and sera, and future progress in the treatment of disease also is dependent to a very large extent upon the information obtained by the pathologist in the post-mortem examination room. Last year reference was made to the establishment of a pathological laboratory at West Middlesex County Hospital, and in October, 1934, the Council approved a scheme for providing pathological departments at all the County hospitals. In the case of the North Middlesex County Hospital the staff of the pathological department was augmented by the appointment of a whole-time assistant pathologist and, as a temporary measure, the part-time pathologist already employed was also placed in supervision of pathological work at Redhill County Hospital. The pathologist at West Middlesex County Hospital was appointed a whole-time officer and also placed in supervision of the pathological work of Hillingdon County Hospital. The Council appreciated the fact that the above arrangements can only be deemed to be of a temporary character and that so soon as adequate laboratory accommodation has been provided and equipped at Central Middlesex, Redhill, and Hillingdon County Hospitals the appointment of pathologists must be proceeded with.

Reference must be made to important conferences which have been held during the year between representatives of the Public Health and Public Assistance Committee and of the Mental Hospitals Committee upon the subject of the possibility of close co-operation between the two Committees, primarily in respect of the provisions of Section 5 of the Mental Treatment Act, 1930, but not limited to this matter only. This Section provides a means whereby certain patients suffering from mental illness may be removed for treatment to a mental hospital without the stigma of certification of unsoundness of mind. Whilst the intentions of the section are most commendable, the statutory restrictions as to its application are such as to make it extremely difficult to use. Notwithstanding this fact, both Committees were most anxious that it should be applied wherever possible. Conferences were held between representatives of the Committees, as well as between the Medical Superintendents of the mental hospitals and the County Medical Officer of Health, and, as a result, general agreement was reached on the following lines:—

- (1) The establishment of psychiatric clinics at the three largest County general hospitals.
- (2) Each clinic to be in charge of the medical superintendent or senior member of the County Mental Hospital to which mental cases usually are transferred from the general hospital where the clinic is held.
- (3) The medical officers in charge of the clinics to act as mental consultants at the hospitals and advise both with regard to out- and in-patients.
- (4) Application to be made to the Board of Control for the approval of the Medical Superintendents and certain senior members of the staffs of the County general hospitals, for the purpose of signing recommendations under Section 5 of the Mental Treatment Act, 1930.

- (5) All *suitable* cases admitted to the general hospitals to be dealt with under Section 5.

At the close of the year the necessary steps to put the above proposals into operation were receiving the attention of the two Committees.

In December, arising out of an application from the Urban District Council of Enfield, a decision of the County Council marking another important extension of policy, was arrived at. In connection with their scheme for maternity and child welfare, the District Council had under consideration the most suitable means by which the services of a consultant obstetrician might be made available to assist local practitioners in cases of obstetrical difficulty and of puerperal fever and pyrexia. As the majority of Enfield women suffering from one or other of these conditions and found to be in need of treatment in a hospital are usually dealt with at the North Middlesex County Hospital, the County Council were asked whether they were willing to arrange for one of the obstetrical staff of the Hospital to act as obstetrical consultant and visit women in Enfield in their own homes should the need arise. Such a proposal marks a definite extension of the services hitherto provided by the County Council,



and very careful consideration was given to the suggestion before a conclusion was reached. On the one hand it was essential that if this work were undertaken the arrangements should be such as to ensure that no serious delay occurred in responding to a request for assistance, whilst at the same time the work of the hospital must not be prejudiced. On the other hand it was felt that the advantage of the medical officer who would be responsible for the treatment of a patient, if admission to hospital were to prove necessary, obtaining first hand knowledge of that patient's history, symptoms and condition, was so great as to make it very desirable the proposal should be acceded to.

On submission of the facts to the County Council, a resolution was adopted agreeing in principle to the proposal that medical officers at the various County hospitals should be available to assist local maternity and child welfare authorities in a consultative capacity in connection with cases of obstetrical difficulty, puerperal fever and puerperal pyrexia, where arrangements could be made which would not seriously interfere with the work of the County Council's hospitals and on terms to be agreed between the Public Health and Public Assistance Committee and the local authority.

The subject of the conditions under which the County Council undertakes the operative treatment of enlarged tonsils and adenoids on behalf of education authorities in the County was under review during the year. Up to the present time the County Council has continued the arrangements entered into between the late boards of guardians and certain local education authorities in the County, by which children attend hospital, are operated upon, and (in the absence of serious symptoms) return home the same day. This practice is not in accordance with modern views and cannot be held to be in the interests of the children treated. The County Council, therefore, terminated all existing agreements and resolved that, where necessary, agreements should be entered into with education authorities providing for the operative treatment at the County Hospitals of enlarged tonsils and adenoids in school children, subject to the condition that the children should be admitted to hospital the day before and remain during the night following the operation, and that the inclusive charge to be made by the County Council in respect of each case should be £1 11s. 6d.

Competition for the gold and silver medals presented at these examinations continues to be very keen. During 1934 the sixth and seventh County Nurses Examinations were held. 82 nurses entered, and of these 68 were successful in obtaining the County certificate. The two gold medals were won by nurses trained at West Middlesex and Central Middlesex County Hospitals, and the silver medals by nurses trained at Central, Redhill and West Middlesex County Hospitals.

Throughout the whole of the year active steps have been taken to improve the structure, equipment and staffing of the hospitals under the control of the County Council. As already mentioned, I do not propose to enumerate these matters in detail but will confine my comments to a few items in connection with each hospital which are of special interest or importance.

*North Middlesex County Hospital.*—In view of the very large number of admissions and casualties which are dealt with at this hospital, it was decided in February to appoint a special medical officer to deal with this work, such officer to be appointed at an annual salary of £350 with residential emoluments or allowance of £100 in lieu thereof. The medical staff of the hospital also was strengthened by the appointment of an additional junior medical officer, and the trained nursing staff on duty in the maternity block was augmented so as to ensure that every ward at all times had at least one trained staff midwife in attendance.

Plans were considered early in the year for the extension of the nurses' home by approximately 85 beds, and tenders for the work were accepted in October. Consideration was given to the size of the maternity block which it was proposed should be erected at the North Middlesex County Hospital to replace the existing department, and after full discussion it was decided that a minimum of 120 beds was necessary.

*Redhill County Hospital.*—In last year's report reference was made to the proposal to revise the scheme for the extension of this hospital, in view of the facilities for constructing an entrance to the hospital on the main Edgware Road consequent upon the acquisition of certain land adjoining the hospital site. The scheme in its amended form provides for a total of 313 acute cases including maternity, and 294 chronic cases, whilst the total resident nursing staff for whom provision will be necessary is 175. The main works included in the new scheme are a new maternity block to accommodate 61 patients, a new chronic block to accommodate 294 patients, alterations to the existing hospital which will increase the hospital by 72 beds, and the erection of an entirely new admission, casualty, X-ray and out-patient block. The total estimated cost of the scheme is £251,500.

*Central Middlesex County Hospital.*—Tenders were accepted during the year for the extensions of the nurses' home by an additional 66 beds, whilst towards the end of the year further extensions were under consideration. In December it was decided to enlarge and remodel the accommodation for patients sent in for observation and suffering from, or suspected to be suffering from, mental disease. In view of the fact that this hospital now receives all observation cases from a large part of the central and north-west areas of the County, this proposal is of special importance. The question of the provision of a central laundry to deal with all the hospitals and institutions in the

central area of the County received consideration in November, and as result it was decided that plans should be drawn up providing for such a laundry to be erected on the Redhill Institution site, with a view to the discontinuance of the use of the laundry at present in the Central Middlesex County Hospital.

*West Middlesex County Hospital.*—Apart from the decision to constitute Warkworth House an addition to the hospital and to place it under the same administrative control, from a medical point of view the establishment of a pathological laboratory at this hospital was the most important development which took effect in 1934.

*Hillingdon County Hospital.*—The Medical Superintendent, Mr. R. Rutherford, F.R.C.S., resigned his appointment in March, and the vacancy thus created was filled by the appointment of Dr. W. A. Steel, M.R.C.P., Deputy Medical Superintendent of the Redhill County Hospital. Mr. Rutherford was the first whole-time medical superintendent appointed to the hospital, and he had taken a very active part in raising the standard of work at the hospital and in creating the prestige which it has undoubtedly acquired in the neighbourhood. The extensions to the nurses' home referred to in previous reports were completed, and by October all resident nurses had been accommodated therein. Pending the extensive additions to this hospital which will be necessary in the future, the adaptation of the nursery block as administrative offices, dispensary and X-ray department was completed during the year, and the adaptation of a small isolation-block as a temporary out-patient department was agreed upon. A visiting radiologist was appointed to the hospital, and new X-ray plant was purchased at a cost of approximately £1,200.

Detailed information with regard to the work carried out at each hospital will be found in the reports of the Medical Superintendents which form appendices to this report. I have, however, set out, pages 21 to 32, a summary of the work carried out at all the Hospitals based upon the information supplied by the Medical Superintendents. To this record, however, should be added the information that during the same period 756 persons were sent to convalescent homes, including the County Council Convalescent Home, Edgbury, Woburn Sands ; 69 to special hospitals and homes, and 23 to epileptic colonies. At the close of the year 234 patients were being maintained by the County Council in such establishments.



SUMMARY OF THE RETURNS RELATING TO THE INSTITUTIONAL TREATMENT OF THE SICK PREPARED BY THE MEDICAL SUPERINTENDENTS AND MEDICAL OFFICERS AS REQUIRED BY THE MINISTRY OF HEALTH.

North Middlesex County Hospital.

ACCOMMODATION FOR THE SICK, MATERNITY AND MENTAL CASES AND THE NUMBER OF BEDS OCCUPIED ON THE 31ST DECEMBER, 1934.

Classification of Wards.	Number of Wards.	BEDS.							
		MEN.		WOMEN.		CHILDREN (Under 16).		Total.	
		Pro-vided.	Occu-pied.	Pro-vided.	Occu-pied.	Pro-vided.	Occu-pied.	Pro-vided.	Occu-pied.
Medical .. ..	4	70	73	75	61	—	—	145	134
Surgical .. ..	6	106	98	106	98	—	—	212	196
Chronic sick* ..	9	141	74	199	191	—	—	340	265
Children .. ..	2	—	—	—	—	82	69	82	69
Tuberculosis ..	—	—	19	—	13	—	3	—	35
Maternity block..	1	—	—	66	48	—	—	66	48
Mental .. ..	2	19	10	21	10	—	—	40	20
Mental defectives	—	—	1	—	—	—	—	—	1
Other :—									
Epilepsy .. ..	—	—	4	—	4	—	—	—	8
Senile Dementia ..	1	—	13	65	54	—	—	65	67
TOTAL .. ..	25	336	292	532	479	82	72	950	843

\* NOTE.—Patients needing hospital treatment because they are suffering from some chronic disease ; also aged infirm persons whose medical and nursing needs approximate to those of chronic patients.

Not included in above table :—

20 balcony beds (available in summer only) for tuberculous patients   Occupied 31st December, Nil.  
66 cots for maternity infants ..   ..   ..   ..   ..   ..   ..   ..   ..   42.

Extent of Provision for Out-Patients.

Nature and scope of the out-patient provision for continuation of treatment, emergency treatment, consultations or otherwise.	The out-patient department provides for treatment of casualties, after-care, consultations and treatment in special departments. These departments are as follows :— (1) General medical ; (2) General surgical ; (3) Ear, nose and throat ; (4) Ophthalmic ; (5) Massage ; (6) Ante-natal and gynæcological ; (7) Casualty ; (8) Dental ; (9) Electro-therapeutic ; (10) Radium and Röntgen deep and superficial X-ray therapy ; (11) Radiological ; (12) Fractures ; (13) Ultra-violet light ; (14) Varicose veins.		
Total number of persons seen in the out-patient department.	10,859 (excluding ante-natal cases).		
Number of these persons who were admitted for in-patient treatment.	642	do.	do.
Number of these persons who had received in-patient treatment.	2,061		
Total number of attendances in the out-patient department.	77,381	do.	do.
Ante-natal clinic	{ Number of women seen   1,868 Total number of atten-   9,199 dances.		



Edmonton House.

ACCOMMODATION FOR THE SICK AND THE NUMBER OF BEDS OCCUPIED ON THE 31ST DECEMBER, 1934.

Classification of Wards.	Number of Wards.	BEDS.							
		MEN.		WOMEN.		CHILDREN. (Under 16).		Total.	
		Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.
Chronic sick .. ..	9	91	91	120	118	—	—	211	209
Total .. ..	9	91	91	120	118	—	—	211	209.

Enfield House.

ACCOMMODATION FOR THE SICK AND MENTAL CASES, AND THE NUMBER OF BEDS OCCUPIED ON THE 31ST DECEMBER, 1934.

Classification of Wards.	Number of Wards.	BEDS.							
		MEN.		WOMEN.		CHILDREN. (Under 16).		Total.	
		Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.
Chronic sick .. ..	7	20	37	44	68	—	—	64	105
Mental defectives ..	10	50	50	—	—	—	—	50	50
Total .. ..	17	70	87	44	68	—	—	114	155

Fortescue Villas, Enfield.

ACCOMMODATION FOR MENTAL CASES, AND THE NUMBER OF BEDS OCCUPIED ON THE 31ST DECEMBER, 1934.

Classification of Wards.	Number of Wards.	BEDS.							
		MEN.		WOMEN.		CHILDREN. (Under 16).		Total.	
		Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.
Mental defectives ..	7	—	—	5	5	28	21	33	26
Total .. ..	7	—	—	5	5	28	21	33	26

Chase Farm Schools.

ACCOMMODATION FOR THE SICK, AND THE NUMBER OF BEDS OCCUPIED ON THE  
31ST DECEMBER, 1934.

Classification of Wards.	Number of Wards.	BEDS.							
		MEN.		WOMEN.		CHILDREN. (Under 16).		Total.	
		Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.
Chronic sick .. ..	4	—	—	37	35	—	—	37	35
Total .. ..	4	—	—	37	35	—	—	37	35

Edgbury Convalescent Home.

ACCOMMODATION FOR THE SICK, AND THE NUMBER OF BEDS OCCUPIED ON THE  
31ST DECEMBER, 1934.

Classification of Wards.	Number of Wards.	BEDS.							
		MEN.		WOMEN.		CHILDREN. (Under 16).		Total.	
		Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.
Medical .. ..	11	—	—	75	48	—	12	75	60
Total .. ..	11	—	—	75	48	—	12	75	60

Central Middlesex County Hospital.

ACCOMMODATION FOR THE SICK, MATERNITY AND MENTAL CASES, AND THE NUMBER OF BEDS OCCUPIED ON THE 31ST DECEMBER, 1934.

Classification of Wards.	Number of Wards.	BEDS.							
		MEN.		WOMEN.		CHILDREN. (Under 16).		Total.	
		Pro-vided.	Occu-pied.	Pro-vided.	Occu-pied.	Pro-vided.	Occu-pied.	Pro-vided.	Occu-pied.
Medical .. ..	8	117	117	142	119	—	27	259	263
Surgical .. ..	5	70	71	50	39	—	2	120	112
Chronic sick ..	3	90	90	151	156	—	—	241	246
Children .. ..	3	—	—	—	—	114	102	114	102
Tuberculosis ..	2	9	7	8	6	—	2	17	15
Maternity .. ..	1	—	—	28	24	—	—	28	24
Mental .. ..	2	7	2	7	2	—	—	14	4
Mental defectives ..	—	—	—	28	26	—	—	28	26
Other .. ..	1	—	—	10	—	—	—	10	—
Total .. ..	25	293	287	424	372	114	133	831	792

Extent of provision for Out-Patients.

Nature and scope of the out-patient provision for continuation of treatment, emergency treatment, consultations or otherwise.	Casualties, massage, electrical treatment, X-ray, after-treatment of injuries.
Total number of persons seen in the out-patient department.	1,678 (excluding ante-natal).
Number of these persons who were admitted for in-patient treatment.	14
Number of these persons who had received in-patient treatment.	188
Total number of attendances in the out-patient department.	4,575      do.      do.
Ante-natal clinic {	Number of women seen .. 616
	Total number of attendances .. .. 2,455



Redhill County Hospital.

ACCOMMODATION FOR THE SICK AND MATERNITY CASES, AND THE NUMBER OF BEDS OCCUPIED ON THE 31ST DECEMBER, 1934.

Classification of Wards.	Number of Wards.	BEDS.							
		MEN.		WOMEN.		CHILDREN. (Under 16).		Total.	
		Pro-vided.	Occu-pied.	Pro-vided.	Occu-pied.	Pro-vided.	Occu-pied.	Pro-vided.	Occu-pied.
Medical .. ..	2	32	20	31	16	—	—	63	36
Surgical .. ..	2	32	28	29	28	—	—	61	56
Children .. ..	1	—	—	—	—	26	31	26	31
Tuberculosis .. ..	—	—	2	—	—	—	1	—	3
Isolation .. ..	—	—	—	3	3	3	3	6	6
Maternity .. ..	1	—	—	21	12	—	—	21	12
Ear, nose and throat ..	2	7	1	5	4	6	13	18	18
Total .. ..	8	71	51	89	63	35	48	195	162

Extent of provision for Out-Patients.

Nature and scope of the out-patient provision for continuation of treatment, emergency treatment, consultations or otherwise.	In-patients transferred to out-patients, casualties and patients seen for consultation, or otherwise, are seen in the following out-patients departments :—General medical, general surgical, ear, nose and throat, X-ray, massage, electro-therapeutic and ultra-violet light, daily; ante-natal, post-natal and dental, each twice weekly; orthopædic, head injury clinic, varicose vein clinic and genito-urinary clinic, each once weekly.		
Total number of persons seen in the out-patient department.	5,183	(excluding ante-natal).	
Number of these persons who were admitted for in-patient treatment.	362		
Number of these persons who had received in-patient treatment.	926		
Total number of attendances in the out-patient department.	21,073	do.	do.
Ante-natal clinic	{ Number of women seen 657 Total number of attend- 2,723 ances.		

Redhill Institution.

ACCOMMODATION FOR THE SICK AND THE NUMBER OF BEDS OCCUPIED  
ON THE 31ST DECEMBER, 1934.

Classification of Wards.	Number of Wards.	BEDS.							
		MEN.		WOMEN.		CHILDREN. (Under 16).		Total.	
		Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.
Medical .. ..	—	—	9	—	23	—	1	—	33
Chronic sick .. ..	7	38	25	81	52	—	—	119	77
Tuberculosis .. ..	—	—	3	—	2	—	—	—	5
Total .. ..	7	38	37	81	77	—	1	119	115

West Middlesex County Hospital.

ACCOMMODATION FOR THE SICK AND MATERNITY CASES, AND THE NUMBER OF BEDS OCCUPIED  
ON THE 31ST DECEMBER, 1934.

Classification of Wards.	Number of Wards.	BEDS.							
		MEN.		WOMEN.		CHILDREN. (Under 16).		Total.	
		Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.
Medical .. ..	13	108	64	133	122	—	—	241	186
Surgical .. ..	4	45	31	45	43	—	—	90	74
Children .. ..	9	—	—	—	—	119	88	119	88
Tuberculosis .. ..	4	16	16	17	10	—	—	33	26
Isolation .. ..	—	—	—	—	—	16	17	16	17
Maternity .. ..	12	—	—	31	23	—	—	31	23
Total .. ..	42	169	111	226	198	135	105	530	414

Extent of provision for Out-Patients.

Nature and scope of the out-patient provision for continuation of treatment, emergency treatment, consultations or otherwise.	Ophthalmic, electrical department, massage, X-ray and casualties.
Total number of persons seen in the out-patient department ..	1,218 (excluding ante-natal).
Number of these persons who were subsequently admitted for in-patient treatment in the Institution .. .. .	93
Number of these persons who had received in-patient treatment in the Institution .. .. .	382
Total number of attendances in the out-patient department ..	9,294 do. do.
Ante-natal clinic { Number of women seen 832 Total number of attend- ances .. .. 5,596	



Warkworth House.

ACCOMMODATION FOR THE SICK AND MENTAL CASES, AND THE NUMBER OF BEDS OCCUPIED ON THE 31ST DECEMBER, 1934.

Classification of Wards.	Number of Wards.	BEDS.							
		MEN.		WOMEN.		CHILDREN (Under 16).		Total.	
		Pro-vided.	Occu-pied.	Pro-vided.	Occu-pied.	Pro-vided.	Occu-pied.	Pro-vided.	Occu-pied.
Chronic sick .. ..	39	192	188	321	317	4	4	517	509
Mental—									
(a) Short stay ..	2	1	1	4	4	—	—	5	5
(b) Long stay ..	7	5	5	18	18	—	—	23	23
Mental defectives ..		4	4	1	1	—	—	5	5
Other mental cases ..		36	35	82	76	2	2	120	113
Total .. ..	48	238	233	426	416	6	6	670	655

Hillingdon County Hospital.

ACCOMMODATION FOR THE SICK AND MATERNITY CASES, AND THE NUMBER OF BEDS OCCUPIED ON THE 31ST DECEMBER, 1934.

Classification of Wards.	Number of Wards.	BEDS.							
		MEN.		WOMEN.		CHILDREN (Under 16).		Total.	
		Pro-vided.	Occu-pied.	Pro-vided.	Occu-pied.	Pro-vided.	Occu-pied.	Pro-vided.	Occu-pied.
Medical .. ..	2	17	8	18	7	—	11	35	26
Surgical .. ..	2	32	20	33	14	—	8	65	42
Children .. ..	1	—	—	—	—	17	14	17	14
Tuberculosis ..	—	—	4	—	4	—	1	—	9
Maternity .. ..	1	—	—	12	19	—	—	12	19
Total .. ..	6	49	32	63	44	17	34	129	110

Extent of provision for Out-Patients.

Nature and scope of the out-patient provision for continuation of treatment, emergency treatment, consultations or otherwise.

Orthopædic clinic.  
Urological clinic.  
Ear, nose and throat clinic.  
General medical clinic.  
General surgical clinic.  
Casualties.  
Massage.

Total number of persons seen in the out-patient department, 984 (excluding ante-natal).  
Number of these persons who were admitted for in-patient treatment, 483.  
Number of these persons who had received in-patient treatment, 462.  
Total number of attendances in the out-patient department, 10,516 (excluding ante-natal).  
Ante-natal clinic { Number of women seen, 275.  
                          Total number of attendances, 1,397.

Hillingdon Institution.

ACCOMMODATION FOR THE SICK, MATERNITY AND MENTAL CASES, AND THE NUMBER OF BEDS OCCUPIED ON THE 31ST DECEMBER, 1934.

Classification of Wards.	Number of Wards.	BEDS.							
		MEN.		WOMEN.		CHILDREN. (Under 16).		Total.	
		Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.
Medical .. ..	—	—	1	—	3	—	2	—	6
Surgical .. .	—	—	2	—	2	—	—	—	4
Chronic sick .. ..	2	54	57	55	48	—	—	109	105
Tuberculosis .. ..	—	—	1	—	—	—	—	—	1
Maternity .. ..	—	—	—	—	3	—	—	—	3
Mental—Temporary ..	—	—	1	—	2	—	—	—	3
Mental defectives ..	—	—	4	—	—	—	—	—	4
Epileptics .. ..	—	—	3	—	5	—	—	—	8
TOTAL .. ..	2	54	69	55	63	—	2	109	134†

† This number is in excess of beds provided owing to extra beds crowded into sick wards.

Staines Institution.

ACCOMMODATION FOR THE SICK, MATERNITY AND MENTAL CASES, AND THE NUMBER OF BEDS OCCUPIED ON THE 31ST DECEMBER, 1934.

Classification of Wards.	Number of Wards.	BEDS.							
		MEN.		WOMEN.		CHILDREN (Under 16).		Total.	
		Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.
Medical .. ..	2	5	5	6	6	—	—	11	11
Surgical .. ..	2	4	3	3	3	—	—	7	6
Chronic sick .. ..	9	63	54	42	42	—	—	105	96
Children .. ..	1	—	—	—	—	11	7	11	7
Maternity .. ..	2	—	—	4	1	—	—	4	1
Mental .. ..	1	2	—	—	—	—	—	2	—
Mental defectives ..	1	—	—	1	1	—	—	1	1
Epileptics .. ..	1	1	1	—	—	—	—	1	1
Total .. ..	19	75	63	56	53	11	7	142	123



	North Middlesex County Hospital.	Edmonton House.	Enfield House.	Fortescue Villas.	Chase Farm Schools. <div>Cases transferred from County Hospitals and Institutions.</div>	Edgbury Con- valescent Home.	Central Middlesex County Hospital.	Redhill County Hospital.	Redhill Institu- tion.	West Middlesex County Hospital.	Wark- worth House.	Hillingdon County Hospital.	Hillingdon Institu- tion.	Staines Institu- tion.
Total number of admissions (in- cluding infants born in hospital)	12,633	330	(a)	—	16	428	6,206	3,954	682	6,044	1,531	2,709	777	214
Number of women confined in hospital ... ..	1,345	—	—	—	—	—	620	460	—	725	1	232	—	19
Number of live births ... ..	1,287	—	—	—	—	—	604	443	—	703	1	213	—	19
Number of still births ... ..	75	—	—	—	—	—	21	21	—	39	—	21	—	—
Number of deaths among the newly-born (i.e., under four weeks of age) (b) ... ..	57	—	—	—	—	—	17	12	—	23	—	10	—	1
Total number of deaths among children under one year ... ..	101	—	—	—	1	—	43	30	—	96	—	42	1	2
Number of maternal deaths among women admitted to hospital for confinement ... ..	8	—	—	—	—	—	4	4	—	6	—	2	—	—
Total number of deaths ... ..	1,601	127	16	—	4	6	834	234	245	685	443	193	191	34
Number of discharges (including infants born in hospital) ... ..	11,068	209	60	1	16	432	5,377	3,738	432	5,417	1,058	2,494	568	165
Duration of stay of patients— (i) under four weeks ... ..	10,130	6	9	—	2	213	4,498	3,888	345	4,280	931	2,398	549	123
(ii) four and under thirteen weeks	2,072	30	9	—	6	196	1,288	321	246	1,506	268	256	118	35
(iii) thirteen weeks or more ... ..	467	300	58	1	12	29	425	63	86	316	302	33	92	41
Number of beds occupied— (i) Average during the year ... ..	911	219	79	26	36	72	782	185	113	470	648	122	134	122
(ii) Highest ... ..	996	227	107 (d)	27	37	76	869	207	119	561	665	145 (c)	147 (c)	130
(iii) Lowest ... ..	812	209	75 (d)	26	35	56	683	133	98	390	631	88	115	114
Number of surgical operations under general anæsthetic (ex- cluding dental operations) ... ..	2,756	—	—	—	—	—	778	1,767	—	968	—	1,196	—	—
Number of abdominal sections ... ..	973	—	—	—	—	—	398	314	—	407	—	250	—	—

(a) Patients are admitted only from the healthy wards of the institution and, owing to frequent interchange between the healthy and sick wards, it is not possible to give an accurate figure of admissions to the sick wards.  
(c) This high figure is due to extra beds being crowded into wards.  
(d) Plus 50 for mentally defective persons.  
(b) Relating only to children born in hospital.

STATISTICS RELATING TO IN-PATIENTS DEALT WITH IN THE MATERNITY DEPARTMENTS OF THE COUNTY  
HOSPITALS AND INSTITUTIONS DURING THE YEAR ENDED 31ST DECEMBER, 1934.

	North Middlesex County Hospital.	Central Middlesex County Hospital.	Redhill County Hospital.	West Middlesex County Hospital.	Hillingdon County Hospital.	Staines Institu- tion.
Number of beds .. ..	66	28	21	31	12	4
Number of cases admitted during the year .. ..	1,564	639	460	735	232	19
Average duration of stay (in days) .. ..	12	11	14	14	13	13
Number of women delivered by—						
(a) Midwives .. ..	1,243	564	440	684	195	18
(b) Doctors .. ..	102	56	20	41	37	1
Number of cases in which medical assistance was sought by a midwife ..	566	34	83	183	117	3
Number of cases notified as—						
(a) Puerperal fever ..	17	—	10	7	3	—
(b) Puerperal pyrexia ..	37	13	8	28	9	—
Number of cases of pemphigus neonatorum .. ..	6	—	—	—	—	—
Number of infants not en- tirely breast-fed while in the institution .. ..	469	19	21	52	14	—
Number of cases notified as ophthalmia neonatorum ..	16	4	—	9	—	—
Number of maternal deaths..	8	4	10	6	2	—
Number of still-births ..	75	21	21	39	21	—
Number of neo-natal deaths	51	17	12	19	10	—





CLASSIFICATION OF IN-PATIENTS WHO WERE DISCHARGED FROM OR WHO DIED  
31ST DEC

DISEASE GROUPS.	North Middlesex County Hospital.		Edmonton House.		Enfield House.		Fortescue Villas.		Chase Farm Schools.	
	Children (under 16).	Men and Women.	Children (under 16).	Men and Women.	Children (under 16).	Men and Women.	Children (under 16).	Men and Women.	Cases transferred from County Hos- pitals & Institutions.	
									Children.	Women.
A. Acute infectious disease (1) ... ..	58	160	—	—	—	—	—	—	—	—
B. Influenza (2) ... ..	7	39	—	14	—	—	—	—	—	—
C. Tuberculosis—										
Pulmonary ... ..	5	239	—	1	—	—	—	—	—	—
Non-pulmonary ... ..	26	42	—	—	—	—	—	—	—	—
D. Malignant disease ... ..	5	532	—	9	—	3	—	—	—	—
E. Rheumatism—										
(a) Acute rheumatism (rheumatic fever), together with sub-acute rheumatism and chorea ... ..	101	118	—	—	—	—	—	—	—	—
(b) Non-articular manifestations of so-called "rheumatism" (mus- cular rheumatism, fibrositis, lumbago and sciatica) ... ..	—	21	—	—	—	—	—	—	—	—
(c) Chronic arthritis ... ..	—	150	—	16	—	—	—	—	—	1
F. Venereal disease ... ..	6	21	—	—	—	—	—	—	—	—
G. Puerperal pyrexia ... ..	—	36	—	—	—	—	—	—	—	—
H. Puerperal fever—										
(a) Women confined in the hospital	—	18	—	—	—	—	—	—	—	—
(b) Other cases ... ..	—	1	—	—	—	—	—	—	—	—
I. Other diseases and accidents con- nected with pregnancy and childbirth ... ..	58	470	—	—	—	—	—	—	—	—
J. Mental diseases—										
(a) Senile dementia ... ..	—	19	—	—	—	7	1	—	—	—
(b) Other ... ..	9	494	—	—	—	17	—	—	—	—
K. Senile decay (3)... ..	—	137	—	44	—	3	—	—	—	3
L. Accidental injury and violence (4) ...	256	839	—	—	—	3	—	—	—	—
<i>In respect of cases not included above :</i>										
M. Disease of the nervous system and sense organs ... ..	252	373	—	17	—	5	—	—	—	—
N. Disease of the respiratory system ...	324	525	—	77	—	4	—	—	2	5
O.     "     circulatory system ... ..	12	808	—	6	—	9	—	—	—	—
P.     "     digestive system ... ..	367	1,476	—	—	—	—	—	—	—	—
Q.     "     genito-urinary system ... ..	70	683	—	—	—	1	—	—	—	—
R.     "     skin ... ..	72	284	—	8	—	—	—	—	—	—
S. Other diseases ... ..	163	465	—	4	—	3	—	—	1	8
T. Mothers and infants discharged from maternity wards and not in- cluded in above figures:—										
(a) Mothers ... ..	—	1,506	—	—	—	—	—	—	—	—
(b) Infants ... ..	1,285	—	—	—	—	—	—	—	—	—
U. Any persons not falling under any of the above headings ... ..	41	96	140	—	—	21	—	—	—	—
Total ... ..	3,117	9,552	140	196	—	76	1	—	3	17

(1) Including—with the exception of acute primary and influenzal pneumonia, tuberculosis, puerperal pyrexia and puerperal fever—all generally notifiable diseases, together with measles, German measles, chickenpox, whooping cough and mumps. Cases of influenzal pneumonia, tuberculosis, puerperal pyrexia, puerperal fever and acute primary pneumonia are recorded respectively under Groups B, C, G, H and N. Cases of encephalitis lethargica are entered under Group A if acute and under Group M if chronic.

(2) Including acute influenzal pneumonia.

(3) Confined to cases and deaths in which no more specific diagnosis was practicable.

(4) Including suicides, attempted suicides and poisoning cases.



IN THE COUNTY HOSPITALS AND INSTITUTIONS DURING THE YEAR ENDED  
EMBER, 1934.

Edgbury Con- valescent Home.		Central Middlesex County Hospital.		Redhill County Hospital.		Redhill Institu- tion.		West Middlesex County Hospital.		Warkworth House.		Hillingdon County Hospital.		Hillingdon Institu- tion.		Staines Institu- tion.	
Children (under 16).	Women.	Children (under 16).	Men and Women.	Children (under 16).	Men and Women.	Children (under 16).	Men and Women.	Children (under 16).	Men and Women.	Children (under 16).	Men and Women.	Children (under 16).	Men and Women.	Children (under 16).	Men and Women.	Children (under 16).	Men and Women.
—	—	101	141	29	30	—	1	134	89	1	1	43	5	13	3	11	3
—	3	1	20	1	37	—	—	1	21	—	—	—	8	—	14	3	6
—	—	2	106	3	15	—	50	8	200	—	3	5	70	1	5	—	—
5	6	—	7	7	8	—	8	26	23	—	2	8	20	1	—	—	—
—	3	1	160	—	37	—	62	2	168	—	65	1	37	—	58	—	9
21	32	28	77	27	22	—	5	20	54	1	—	23	10	—	—	2	1
—	—	6	27	—	14	—	7	3	38	—	14	—	6	—	9	—	3
—	18	1	60	—	10	—	11	—	67	—	19	—	10	—	—	—	2
—	—	—	11	—	7	—	7	—	7	—	4	3	2	—	13	—	—
—	—	—	16	—	8	—	—	—	35	—	—	—	9	—	—	—	—
—	—	—	—	—	10	—	—	—	7	—	—	—	2	—	—	—	—
—	—	—	—	—	5	—	—	—	23	—	—	—	1	—	—	—	—
—	23	19	293	—	301	—	8	—	294	—	27	—	208	—	17	—	8
—	—	—	7	—	1	—	8	—	—	—	—	—	—	—	4	—	—
—	—	8	289	1	17	—	29	2	8	5	339	—	3	1	59	3	4
—	8	—	164	—	—	—	79	—	—	—	48	—	—	—	40	—	8
5	10	84	384	189	438	1	52	70	386	—	47	86	293	—	67	1	6
1	45	106	261	147	68	—	52	114	108	5	221	54	39	1	32	2	14
4	48	125	321	92	110	—	70	187	400	3	89	68	81	5	75	4	13
5	65	5	421	1	91	—	137	27	403	—	366	11	53	—	180	1	22
—	55	198	562	417	437	—	23	228	706	6	16	299	449	—	40	—	4
4	36	29	262	93	114	—	25	23	297	—	26	17	168	1	31	—	1
1	1	66	124	14	18	—	22	95	213	7	47	11	24	5	43	4	9
2	20	104	260	120	167	—	12	58	120	1	36	79	42	10	31	13	1
—	—	—	606	—	359	—	—	—	689	—	—	—	218	—	—	—	19
—	—	603	—	431	—	—	—	674	—	—	—	203	—	—	—	18	—
17	—	141	4	43	33	—	8	70	4	85	17	5	13	—	—	—	4
65	373	1,628	4,583	1,615	2,357	1	676	1,742	4,360	114	1,387	916	1,771	38	721	62	137

### Poor Law Medical Out-Relief.

The County Council makes provision for medical attendance upon sick poor persons in their own homes through its staff of district medical officers, of whom there are 59. This is a part-time service, operated by doctors engaged in private practice in the County. Below are set out the conditions of appointment which have been approved by the County Council and applied to district medical officers appointed by the County Council since February, 1934, and such others as have agreed to accept the conditions :—

Persons appointed to the position of District Medical Officer shall be part-time officers and shall be remunerated by way of salary, subject to annual review in accordance with any increase or decrease in the duties performed ;

The salaries of District Medical Officers shall be of an amount of £25 per annum or multiples thereof, with a maximum of £300 per annum ;

If in the case of any Medical Relief District the duties performed by the District Medical Officer are such as to warrant the payment of a salary exceeding £300 per annum, consideration shall be given to the question of the division of such district into two or more districts and the consequential appointment of an additional officer or officers ;

District Medical Officers shall be paid, in addition to their salaries, fees in respect of attendances at confinements in accordance with the first four items of the scale of fees approved by the Ministry of Health under the Midwives Acts, 1902-1926 ;

The cost of expensive drugs supplied to or prescribed for patients by District Medical Officers shall be borne by the County Council. The determination as to drugs included in this category shall rest with the County Council ;

District Medical Officers shall be entitled to a fee of 10s. 6d. in respect of the services of a second medical practitioner engaged to administer a short anaesthetic in connection with the performance of minor operations, &c. ;

Save as provided in the foregoing paragraphs, no fees or allowances shall be payable to District Medical Officers in addition to their salaries ;

Save in exceptional circumstances, the appointment of a district medical officer shall be terminated on his attaining the age of 65 years.

Revision of salaries resulted in seven district medical officers receiving increases totalling £608 15s. for the year 1934.

During 1934, approximately 28,055 visits were made to patients in their homes by district medical officers, and approximately 32,226 attendances were made by patients at the doctors' surgeries for advice and treatment.

Many persons who receive domiciliary medical attendance from district medical officers are also in need of nursing attention, and without this attention they might require admission to a hospital or an institution. The various district nursing associations throughout the County provide this attention and the value of their work is recognized by the County Council by the payment of annual grants. A return of work carried out during the year is furnished by each association, and the grants are calculated upon the number of visits paid to persons in receipt of Poor Law relief. The total number of nursing associations to whom grants were made during the financial year 1934-35 was 29 and the total amount paid was £1,165.

In addition to providing medical and nursing attention to persons in receipt of out-relief through district medical officers and local nursing associations, the Council also supplied surgical instruments, *e.g.*, artificial limbs, splints, trusses, &c., to 507 persons, dental treatment to 323, special forms of medical treatment, *e.g.*, insulin, &c., to 24, whilst 177 were sent to convalescent homes and 11 who were suffering from epilepsy were sent to suitable colonies. (*N.B.*—The cases sent to convalescent homes and colonies are included in the numbers reported on page 20.)

### GRANTS TO VOLUNTARY HOSPITALS.

In last year's annual report it was stated that the County Council had decided to renew the grants to certain voluntary hospitals which had been made by the late boards of guardians prior to the Local Government Act, 1929, coming into force, but also decided to review the position before the next financial year. This review has now taken place and in June, 1934, the Council decided to make subscriptions varying from £5 5s. to £15 15s. to eight general and special hospitals outside the County, which were rendering special services to the sick poor of Middlesex.

With regard to the local hospitals in Middlesex, as many of these treat patients who, it is considered, might otherwise have to be admitted to County Hospitals, it was decided to recognise their services by the payment of an annual grant of £15 15s. to those hospitals with out-patient departments, and £10 10s. to those without.



The total amount paid by the Council for the financial year 1934-35 was £367 10s., and this was allocated as follows :—

£73 10s. to eight general and special hospitals outside the County and  
£294 to twenty local hospitals in Middlesex.

**Institutional Provision for Mental Defectives.**

I am indebted to Dr. E. Laval, Medical Officer under the Mental Deficiency Act, 1913, for the following information as to the extent of the institutional provision made by the County Council, as at 31st December, 1934 :—

Institutions provided for mental defectives by the Middlesex Local Authority—						
Middlesex Colony certified institution (partially erected)	..	..	..	..	..	639
Craufurd Home certified institution	..	..	..	..	..	117
Bramley House certified institution	..	..	..	..	..	50
						— 806
Institutions (certified) approved under Section 37 of the Mental Deficiency Act, 1913—						
Enfield House certified institution	..	..	..	..	..	50
Fortescue Villas certified institution	..	..	..	..	..	33
Hillingdon certified institution	..	..	..	..	..	7
						— 90
						— 896 beds
Cases maintained by the Mental Deficiency Committee in other certified institutions in various parts of the country						
	..	..	..	..	..	.. 538

**Welfare of the Blind.**

The County Council’s scheme for promoting the welfare of blind persons provides that the Middlesex Association for the Blind shall be responsible, on behalf of the County Council, for the keeping of the register of blind persons in Middlesex and for carrying out much of the detailed executive work in connection with the welfare of Middlesex blind persons. Close co-operation is maintained between the Association and the Public Health, Education and Public Assistance Departments of the County Council. Details regarding the various phases of activity of the Association among blind people were set out in my Annual Report for 1931, and no radical alterations have been instituted since that time.

The actual work of certification of blind persons for admission to the Register is carried out by the Public Health Department of the County Council. Two part-time consulting ophthalmic surgeons—Mr. C. D. Shapland, F.R.C.S., M.R.C.P., and Mr. E. F. King, F.R.C.S., D.O.M.S.—attend the Council’s blind certification clinic at monthly intervals, or more frequently as may be necessary, and carry out an ophthalmological examination of applicants for registration referred by the Association to the clinic. Their findings are recorded on the detailed form of report and certificate drawn up by the Prevention of Blindness Committee of the Union of Counties Association for the Blind, which has been adopted by the County Council. A copy of their report on every applicant is sent for research purposes to the Prevention of Blindness Committee, who, with the approval of the Ministry of Health, are carrying out a nation-wide investigation into the various factors concerned in the causation of blindness. It is to be anticipated that the result of the work of this committee will throw light on the problem of the prevention of blindness, and form a sound basis for valuable preventive measures in the future.

During the year, 19 sessions of the blind certification clinic were held, each attended by both ophthalmic surgeons. 272 persons presented themselves for examination, and in addition 51 persons, unable owing to ill-health, old age or other reason to attend the clinic, were examined in their own homes or elsewhere. Of the 323 persons examined, 237 were found to be blind within the meaning of the Blind Persons Act, 1920.

*Register of Blind Persons.*—The following returns, extracted from a report from the Middlesex Association for the Blind, give information regarding the number of blind persons ordinarily resident in the County.

	31st March, 1933.	31st March, 1934.	31st March, 1935.
Babies under 5 .. .. .	4	4	4
Children of school age (5-16) .. .. .	58	61	49
Persons under training .. .. .	56	54	38
Persons apparently trainable who refuse training or are awaiting vacancies .. .. .	11	9	14
Employed—			
Workshops .. .. .	72	77	79
Home workers .. .. .	80	88	99
Elsewhere .. .. .	161	189	193
	313	354	371
Trained unemployed .. .. .	4	4	11
Unemployable .. .. .	1,159	1,235	1,273
Totals .. .. .	1,605	1,721	1,760

It will be noted that the total increase in the number of blind persons on the Register on 31st March, 1935, as compared with the number on 31st March, 1934, was 39, whilst the following table shows the increase or decrease in the number of blind persons at different age groups at the close of the same period.

Under 5.. .. .	None
5-16 .. .. .	minus 12
16-21 .. .. .	plus 10
21-30 .. .. .	plus 3
30-40 .. .. .	minus 3
40-50 .. .. .	plus 3
50-60 .. .. .	plus 12
60-70 .. .. .	plus 9
Over 70 .. .. .	plus 20
Age unknown .. .. .	minus 3

In its scheme of administrative arrangements proposed to be made for discharging the functions transferred to the Council under Part I of the Local Government Act, 1929, the County Council made a declaration to the effect that “all domiciliary assistance to blind persons shall be provided exclusively by virtue of the Blind Persons Act, 1920, and not by way of poor relief.”

During the year ended 31st March, 1935, County Council grants towards the cost of surgical appliances, dentures, convalescence, &c., amounted to £323 17s. 3d., and 952 blind persons were afforded domiciliary assistance at a cost to the Council of £25,999 19s. 1d.

*Prevention of Blindness.*—The grant made by the County Council to the Middlesex Association for the Blind for the prevention of blindness was increased during the year from £10 to £30 per annum.

Voluntary Hospitals.

Detailed information as to voluntary hospitals in Middlesex and the work carried out therein was set out in last year’s annual report. No revision of the information there tabulated was undertaken during 1934.

Co-operation with the Middlesex Voluntary Hospitals Association, in accordance with Section 13 of the Local Government Act, 1929, has continued during the year.

In 1933, as a result of representations made by the Association, it was decided to form a Joint Advisory Committee for a period of one year. The duties of the Joint Committee were to be :—

- (1) To discuss existing hospital accommodation in the County.
- (2) To examine into the further needs of the area.
- (3) To advise and report upon the best means of achieving the necessary extension of accommodation.

It was agreed that the joint committee should not in any way interfere with the autonomy of the hospitals within the County as regards finance, management or the election of governing body and medical and surgical staff, but should act strictly in an advisory capacity.

The joint committee held three meetings and dealt with a number of matters submitted to it. As it was felt that the joint committee was serving a useful purpose, it was decided in November, 1934, that it should continue in existence and not cease to function at the expiration of the original experimental period of one year, for which it had been appointed.



Maternity and Child Welfare.

ADMINISTRATION OF THE MIDWIVES ACTS, 1902-1926.

The County Council is the local supervising authority under the Midwives Acts for the administrative county with the exception of the Boroughs of Ealing, Tottenham and Willesden and the Urban District of Edmonton.

*Notification of Intention to Practise.*—During 1934, notification of intention to practise midwifery, either temporarily or permanently, in the area for which the County Council is responsible, was received by the County Council from 401 midwives, distributed among the sanitary districts of the County as shown in the following table :—

Districts.	Total Number of Midwives practising during 1934.	Removed from District during 1934.	Practising Temporarily during 1934.	Number in District end of 1934.
Acton ( <i>Borough</i> ) .. .. .	12	1	1	10
Brentford and Chiswick ( <i>Borough</i> ) ..	12	—	—	12
Enfield .. .. .	10	—	—	10
Feltham .. .. .	7	—	—	7
Finchley ( <i>Borough</i> ).. .. .	9	3*	—	6
Friern Barnet .. .. .	6	—	1	5
Hampton .. .. .	3	—	—	3
Hampton Wick .. .. .	1	—	—	1
Harrow .. .. .	30	1	3	26
Hayes and Harlington .. .. .	19	—	1	18
Hendon ( <i>Borough</i> ) .. .. .	34	3	3	28
Heston and Isleworth ( <i>Borough</i> ) .. ..	23	1	—	22
Hornsey ( <i>Borough</i> ) .. .. .	18	—	—	18
Potters Bar .. .. .	3	—	1	2
Ruislip-Northwood .. .. .	8	—	—	8
Southall-Norwood .. .. .	14	2	—	12
Southgate ( <i>Borough</i> ) .. .. .	15	1	1	13
Staines .. .. .	17	2	2	13
Sunbury .. .. .	6	—	—	6
Teddington .. .. .	3	—	—	3
Twickenham ( <i>Borough</i> ) .. .. .	13	—	—	13
Uxbridge .. .. .	9	1	—	8
Wembley .. .. .	49	1	1	47
Wood Green ( <i>Borough</i> ) .. .. .	8	—	—	8
Yiewsley and West Drayton .. .. .	6	—	—	6
Midwives residing outside the County Council's area .. .. .	66	4	18	44
Totals .. .. .	401	20	32	349

\* One removed from roll.

The supply of practising midwives in the County Council's area is adequate to the demand for their services, and at the end of 1934 there were 22 more midwives in practice than at the beginning of the year, a number quite sufficient to supply the needs of the increased population.

In addition to the 401 midwives who notified their intention to practise, a further 782 women, holding the certificate of the Central Midwives Board, were resident in the area supervised by the County Council under the Midwives Acts. Forty-six of these were employed in the County Council's hospitals and institutions, and the remainder were not engaged as practising midwives, but were employed as health visitors, private and hospital nurses, &c.

*Qualifications of Practising Midwives.*—The qualifications held by the 401 midwives practising in the County Council's area during 1934 may be summarised as follows :—

In possession of the certificate of the Central Midwives Board .. ..	386
In possession of certificate of the London Obstetrical Society .. ..	7
In possession of a recognised hospital certificate .. .. .	2
Enrolled by reason of having been in <i>bona fide</i> practice previous to the Midwives Act, 1902, coming into operation .. .. .	6
	<u>401</u>

The number of *bona fide* midwives practising in the County Council's area now amounts to only 1·5 per cent. of the total.



*Women not Certified under the Midwives Acts.*—The County Council instituted proceedings under the Midwives Acts against a woman whose name had been removed from the Midwives Roll. This woman continued to attend women in childbirth otherwise than under the direction of a medical practitioner, and to hold herself out as a person specially qualified to practice midwifery. The Bench found the defendant guilty and inflicted a fine of £9 and £3 3s. costs.

Proceedings also were taken by the Central Midwives Board against an uncertified woman who had held herself out to be a midwife. The charges were proved and a fine of £20 inflicted, with the alternative of one month's imprisonment.

*Number of Births attended by Midwives.*—Each midwife, who notifies her intention to practise in the area for which the County Council is the local supervising authority, is required to make a return at the end of the year of the number of cases attended by her in this area, either in the capacity of midwife or of maternity nurse.

An absolutely accurate return cannot be obtained owing to removals or deaths of midwives, and to the temporary residence of midwives in the area, but the errors thus introduced are only small. The returns for 1934 show that in the County Council's administrative area under the Midwives Acts certified midwives conducted 5,944 confinements, and acted as maternity nurses to a further 3,072 women who were attended by doctors. The total number of births in the area was 17,929 and the number attended by midwives represents 33 per cent. of the total, and by practising midwives acting as maternity nurses to a further 17 per cent., as compared with percentages of 36 and 16 respectively in 1933. The number of cases attended by individual midwives varied considerably from very few to 150 or more.

Midwives who were admitted to the Roll of Certified Midwives without examination and in virtue of their having been in practice as midwives at the time of the passing of the Midwives Act, 1902, conducted the confinements of 190 women, equivalent to 3·2 per cent. of all births attended by midwives, and acted as maternity nurses in 65 cases (2·1 per cent of those in which midwives acted in that capacity).

Details as to the numbers of births attended by certified midwives in each sanitary district in the County are shown in the table which follows. By the courtesy of the Medical Officers of Health of the Boroughs of Ealing, Tottenham and Willesden, and of the Urban District of Edmonton, who have kindly furnished me with figures, it has been possible to include at the foot of the table corresponding information relating to these four districts and thus arrive at comprehensive totals for the whole County.

BIRTHS ATTENDED BY MIDWIVES RESIDING IN EACH SANITARY AREA.

Districts.	Births attended by Midwives residing in each District.	Births at which Midwives acted as Nurses.
Acton ( <i>Borough</i> ) .. .. .	91	82
Brentford and Chiswick ( <i>Borough</i> ) .. .. .	246	37
Enfield .. .. .	363	67
Feltham .. .. .	267	84
Finchley ( <i>Borough</i> ) .. .. .	56	32
Friern Barnet .. .. .	120	30
Hampton .. .. .	173	47
Hampton Wick .. .. .	2	4
Harrow .. .. .	411	364
Hayes and Harlington .. .. .	395	154
Hendon ( <i>Borough</i> ) .. .. .	409	267
Heston and Isleworth ( <i>Borough</i> ) .. .. .	569	284
Hornsey ( <i>Borough</i> ) .. .. .	299	218
Potters Bar .. .. .	23	9
Ruislip-Northwood .. .. .	91	81
Southall-Norwood .. .. .	255	119
Southgate ( <i>Borough</i> ) .. .. .	89	172
Staines .. .. .	253	111
Sunbury .. .. .	96	32
Teddington .. .. .	145	34
Twickenham ( <i>Borough</i> ) .. .. .	284	223
Uxbridge .. .. .	204	146
Wembley .. .. .	508	238
Wood Green ( <i>Borough</i> ) .. .. .	186	157
Yiewsley and West Drayton .. .. .	217	26
<i>Attended by midwives residing outside the County Council's area</i>	192	54
Totals .. .. .	5,944	3,072
Ealing ( <i>Borough</i> ) .. .. .	585	167
Edmonton .. .. .	704	82
Tottenham ( <i>Borough</i> ) .. .. .	805	40
Willesden ( <i>Borough</i> ) .. .. .	537	258
Grand totals .. .. .	8,575	3,619

The total number of births in the County as a whole was 26,376 and the table on the preceding page shows that 32 per cent. of these were attended by midwives and a further 14 per cent. were attended by practising midwives in the capacity of nurses. In the area supervised by the County Council the percentages were 33 and 17 respectively.

*Notifications.*—The number of notifications received from midwives, in accordance with the Rules of the Central Midwives Board, together with similar figures for the previous three years, are as follows :—

Notifications.	1931.	1932.	1933.	1934.
Sending for medical assistance .. .. .	1,271	1,377	1,245	1,409
Still-birth .. .. .	90	97	82	92
Death of infant .. .. .	54	55	44	60
Death of mother .. .. .	2	3	5	2
Laying out the dead .. .. .	34	34	39	40
Artificial feeding.. .. .	24	39	34	47
Liability to be a source of infection .. .. .	82	76	78	107
Totals .. .. .	1,557	1,681	1,525	1,757

The notifications of sending for medical aid may be classified as follows :—

Medical assistance required for conditions arising	1931.	1932.	1933.	1934.
During pregnancy .. .. .	166	174	124	170
During labour .. .. .	723	822	748	811
During lying-in .. .. .	103	79	118	127
In infant .. .. .	279	302	255	301
Totals .. .. .	1,271	1,377	1,245	1,409

*Maternal Deaths.*—Two notifications were received of the deaths of women while actually under the care of midwives. To these must be added the number of deaths of women, who, while being attended by midwives, became so seriously ill that transfer to a hospital was necessitated, where they subsequently died. Six cases of this nature occurred during the year, making a total of eight deaths among women attended by midwives, or a death-rate of 1·35 per 1,000 births attended. The maternal death-rate for all births in the administrative County during 1934 was 3·60 per 1,000.

Enquiries were made into each case, and from these it was ascertained that the causes of death may be classified as follows :—

Complications of labour or puerperium—									
Obstetric shock .. .. .	..	..	..	..	..	..	..	..	2
Sepsis .. .. .	..	..	..	..	..	..	..	..	5
Associated conditions —									
Pneumonia .. .. .	..	..	..	..	..	..	..	..	1
									—
									8
									—

*Puerperal Fever and Puerperal Pyrexia.*—Under the Public Health (Notification of Puerperal Fever and Puerperal Pyrexia) Regulations, 1926, notifications were received of 13 cases of puerperal fever and 17 cases of puerperal pyrexia, occurring amongst women who had been attended in their confinements by certified midwives. These numbers represent 8·33 per cent. and 5·82 per cent. respectively of the total notifications received under the Regulations, and are substantially lower than the corresponding figures for the previous year.

Enquiry was made into the actual cause of raised temperature in all cases of this condition occurring in the practices of certified midwives and the information obtained indicates that puerperal sepsis was responsible for the rise of temperature in 23 out of the 30 cases notified under the Regulations. This is equivalent to an incidence-rate of puerperal sepsis among midwives' cases of 3·87 per 1,000 births.



The following table records the yearly number of notifications of puerperal fever, &c., and of deaths from puerperal sepsis, both in the County generally and among midwives' cases for the past ten years :—

PUERPERAL FEVER AND PUERPERAL PYREXIA.

Year.	Total Number of Births Registered in the County.	Total Number of cases notified in the County.		Total Number of deaths from Puerperal Sepsis in the County.	Number of Births attended by midwives.	Cases notified in practices of midwives.		Deaths from Puerperal Sepsis amongst midwives' cases.
		Puerperal Fever.	Puerperal Pyrexia.			Puerperal Fever.	Puerperal Pyrexia.	
1925..	21,533	62	—	25	10,164	18	—	5
1926..	21,703	63	74†	30	8,869†	23	17‡	8
1927..	21,123	41	197	24	8,699†	9	46	5
1928..	22,665	63	177	42	8,596†	15	35	6
1929..	23,331	58	188	27	8,655†	14	40	—
1930..	24,840	82*	224*	55	7,727§	16§	41§	6§
1931..	{ 25,507 (a) 17,089 (b)	{ 93 (a) 61 (b)	{ 216 (a) 143 (b)	{ 38 (a) 28 (b)	5,837 (b)	15 (b)	24 (b)	3 (b)
1932..	{ 25,437 (a) 17,171 (b)	{ 88 (a) 55 (b)	{ 278 (a) 200 (b)	{ 45 (a) 32 (b)	5,799 (b)	6 (b)	23 (b)	— (b)
1933..	{ 24,501 (a) 16,602 (b)	{ 110 (a) 67 (b)	{ 314 (a) 211 (b)	{ 52 (a) 36 (b)	6,049 (b)	13 (b)	33 (b)	8 (b)
1934..	{ 26,376 (a) 17,929 (b)	{ 156 (a) 112 (b)	{ 292 (a) 190 (b)	{ 46 (a) 33 (b)	5,944 (b)	13 (b)	17 (b)	5 (b)

\* These figures relate to periods of 53 weeks.

† Middlesex cases only.

‡ From 1st October, 1926.

§ Excluding those occurring during the last quarter of the year 1930 in the Boroughs of Ealing, Tottenham and Willesden and the Urban District of Edmonton.

(a) The County.

(b) Area for which the County Council is the Local Supervising Authority under the Midwives Acts.



*Ophthalmia Neonatorum.*—Medical assistance was sought by certified midwives on account of inflammation of, or discharge from, infants' eyes in 120 instances; and in 25 cases the medical practitioners called in notified the condition as ophthalmia neonatorum.

In view of the serious consequences which may follow if satisfactory treatment is not promptly instituted, all cases of pathological conditions of the eyes occurring in new-born infants are very closely followed up, with a view to ensuring that adequate treatment is obtained and to ascertaining whether visual impairment has resulted.

During 1934 no apparent injury to vision resulted in any instance.

*Disciplinary Action.*—The conduct of one midwife was reported to the Central Midwives Board during 1934. The case was heard in December, and after due consideration the Board decided to remove the midwife's name from the Roll and to cancel her certificate.

On the instructions of the Maternity and Child Welfare Committee of the County Council, a letter of warning was sent to one midwife, and verbal cautions were administered to certified midwives in fourteen instances by the Council's inspectors of midwives.

*Visits of Inspection.*—Visits made by the Council's inspectors of midwives during 1934 may be classified as follows:—

Visits to midwives who had notified their intention to practise	..	..	..	..	1,086
„ midwives who had not notified	..	..	..	..	2
„ women not certified under the Midwives Act	..	..	..	..	3
„ patients' homes in connection with cases of ophthalmia, &c.	..	..	..	..	21
„ other persons in connection with investigations under the Midwives Acts, etc.	..	..	..	..	106
„ premises in connection with the registration of nursing homes	..	..	..	..	448
„ ante-natal clinics and welfare centres	..	..	..	..	63
„ scattered homes	..	..	..	..	15
„ homes of foster mothers in connection with investigations under the Children Act	..	..	..	..	27
Total	..	..	..	..	1,771

*Post-certificate Instruction of Midwives.*—The arrangements made by the County Council, in co-operation with London County Council, for the post-certificate instruction of certified midwives practising in their area, followed similar lines to those adopted in previous years.

*Payment of Fees to Medical Practitioners.*—Under the Rules of the Central Midwives Board, a midwife is required to send for medical assistance in all cases of illness or abnormality in the course of pregnancy, labour, or lying-in, and the doctor sent for is entitled to payment of a fee by the Local Supervising Authority, in accordance with a scale and subject to certain conditions laid down by the Ministry of Health. The Local Supervising Authority has power to recover from the patient or her husband the amount so paid, or such proportion of it as the financial circumstances of the case justify.

In the case of inflammation of, or discharge from, infants' eyes, this right of recovery has been waived by the County Council, in accordance with the suggestion of the Ministry of Health, in order that there may be no temptation for midwives to delay calling in a doctor in cases of apparently trivial affection of the eyes.

The following table furnishes details as to the cost to the County Council of this service during the past four years. It should be noted that while the financial particulars refer to the financial years, the numbers of notifications and claims are those received during the corresponding calendar years.

FEES PAID TO MEDICAL PRACTITIONERS UNDER SECTION 14 OF THE MIDWIVES ACT, 1918.

Year.	A. Number of notifications of sending for Medical Aid.	B. Number of Claims for Fees received.	Percentage of B. to A.	C. Total amount due to Doctors in respect of cases attended by them during financial year.			D. Income from Patients in respect of Doctors' fees.		
					£	s. d.		£	s. d.
1931 ...	1,271	724	57·0	1931-32	993	0 0	1931-32	435	1 0
1932 ...	1,377	862	62·6	1932-33	1,163	13 0	1932-33	509	9 5
1933 ...	1,245	766	61·5	1933-34	1,102	13 0	1933-34	536	6 3
1934 ...	1,409	909	63·8	1934-35	1,387	5 0	1934-35	518	2 3

*Compensation to Midwives.*—Section 2 (i) of the Midwives Act, 1926, states that where a midwife has been suspended from practice in order to prevent the spread of infection she shall, if she is not herself in default, be entitled to recover from the local supervising authority such amount by way of compensation for loss of practice as is reasonable in the circumstances of the case.

During the year, 12 claims for compensation were put forward by midwives who had been suspended from, or restricted in, their practice, in order to avoid spread of infection. In eight instances the midwives had been in attendance on women who developed puerperal fever, and did not resume work until they had ceased nursing their patients and had carried out satisfactory disinfection. Three midwives had been nursing women whose children developed scarlet fever and were restricted to these cases for eight days, after which period they carried out disinfection and resumed duty. One midwife was found to be harbouring hæmolytic streptococci in her throat and was suspended from practice until bacteriological examination showed she was free from infection. The claims were considered by the Maternity and Child Welfare Committee and were deemed reasonable in view of the circumstances of the cases. In all, 119 days were lost by these midwives and sums amounting to £33 13s. 6d. were paid by way of compensation.

NURSING HOMES.

The County Council administers the Nursing Homes Registration Act, 1927, in the whole of the County with the exception of the Boroughs of Ealing, Tottenham and Willesden and the Urban District of Edmonton. In those districts the administration of the Act has been delegated by the County Council to the local sanitary authorities in view of the fact that the supervision of midwives is carried out by the local councils.

At the beginning of the year, 154 nursing homes appeared on the County Council's register. During 1934, applications for registration were received in respect of a further 25 homes. All of these homes have been inspected by Dr. Back, Assistant County Medical Officer, accompanied by Miss Coleman, Inspector of Midwives. In addition premises were inspected in connection with two further applications which had been received towards the close of the previous year.

The table on page 42 gives particulars of the action taken by the Council in regard to the applications, also information as to homes removed from the register, and the number of homes appearing on the register at the beginning and end of the year respectively.

The following table shows the number of registered nursing homes in each sanitary district for which the County Council is the authority for the administration of the Nursing Homes Registration Act. The figures in brackets indicate the number of homes devoted, either wholly or in part, to the reception of maternity cases.

Districts.	Number of Nursing Homes on Register at end of 1934.	Approved accommoda- tion (beds) at end of 1934.
Acton ( <i>Borough</i> ) .. .. .	5 (3)	16
Brentford and Chiswick ( <i>Borough</i> ).. ..	10 (5)	63
Enfield .. .. .	7 (6)	28
Feltham .. .. .	2 (1)	11
Finchley ( <i>Borough</i> ) .. .. .	13 (6)	70
Friern Barnet .. .. .	2 (2)	3
Hampton .. .. .	2 (2)	11
Hampton Wick .. .. .	— (—)	—
Harrow .. .. .	20 (15)	164
Hayes and Harlington .. .. .	3 (3)	13
Hendon ( <i>Borough</i> ) .. .. .	14 (12)	92
Heston and Isleworth ( <i>Borough</i> ) .. ..	7 (5)	35
Hornsey ( <i>Borough</i> ) .. .. .	24 (13)	230
Potters Bar .. .. .	— (—)	—
Ruislip-Northwood .. .. .	5 (4)	17
Southall-Norwood .. .. .	2 (2)	19
Southgate ( <i>Borough</i> ) .. .. .	6 (6)	59
Staines .. .. .	2 (1)	25
Sunbury .. .. .	3 (—)	30
Teddington .. .. .	6 (3)	43
Twickenham ( <i>Borough</i> ) .. .. .	9 (8)	69
Uxbridge .. .. .	3 (1)	29
Wembley .. .. .	8 (8)	40
Wood Green ( <i>Borough</i> ) .. .. .	2 (2)	12
Yiewsley and West Drayton .. .. .	1 (1)	9
Totals .. .. .	156 (109)	1,088



NURSING HOMES.

Year.	On register at beginning of year.		Applica- tions received.	Applica- tions voluntarily withdrawn.	Registra- tions refused.	Registra- tions granted.	Applica- tions held over or postponed.	Removed from register on account of death or removal, or voluntarily.	Registra- tion cancelled.	On register at close of year.	
	Number of homes.	Approved accommo- dation (beds).								Number.	Accommo- dation (beds).
1931 ..	..	133	23	5	4	19	2	15	—	137	864
1932 ..	..	137	32	4	—	28	2	19	—	146	918
1933 ..	..	146	31	3	—	28	2	20	—	154	1011
1934 ..	..	154	25	2	—	21	4	19	—	156	1,088



An enquiry was made as to the number of births which occurred during 1934 in nursing homes in the County. In addition to information obtained directly from proprietors of nursing homes registered by the County Council, the following table contains also similar particulars with regard to nursing homes in Ealing, Edmonton, Tottenham and Willesden which have been kindly supplied by the respective medical officers of health, and thus furnishes a comprehensive figure for the whole administrative County.

BIRTHS OCCURRING IN NURSING HOMES DURING 1934.

	County Council's Area.	Ealing.	Edmon- ton.	Totten- ham.	Willes- den.	Adminis- trative County.
(a) Attended by doctors ..	1,876	310	8	2	8	2,204
(b) Attended by State certi- fied midwives, no doctor being in attendance ..	342	35	12	6	4	399
Totals .. ..	2,218	345	20	8	12	2,603

MATERNITY AND CHILD WELFARE SCHEME.

The County Council is the authority for maternity and child welfare in 10 of the 29 sanitary districts included in the administrative County, namely the Urban Districts of Feltham, Friern Barnet, Hampton Wick, Hayes and Harlington, Potters Bar, Ruislip-Northwood, Staines, Sunbury, Uxbridge and Yiewsley and West Drayton. The former Hendon Rural District became merged in the Harrow Urban District on 1st April, but at the request of the Harrow Council the County Council continued to act as agent for the District Council and administered maternity and child welfare services in the area throughout the remainder of the year. The Kingsbury Urban District was transferred to the Wembley Urban District on 1st April, from which date the County Council ceased to carry on maternity and child welfare functions in Kingsbury.

The following is a summary of certain statistics relating to the area for which the County Council is the maternity and child welfare authority (as at the close of 1934) :—

Area .. .. .	54,838 acres
Population .. .. .	197,232
Live-births .. .. .	3,561
Birth-rate .. .. .	18·1
Number of infant deaths .. .. .	164
Infantile mortality rate, per 1,000 live-births .. .. .	46·0
Number of maternal deaths .. .. .	10
Maternal mortality rate, per 1,000 live-births .. .. .	2·81
Number of cases of puerperal fever.. .. .	6
„ puerperal pyrexia .. .. .	25
„ ophthalmia neonatorum .. .. .	15

During the year the Maternity and Child Welfare Committee had under consideration the services provided with special reference to the problem of maternal mortality. In addition to systematic home visiting by health visitors, the Council provides special *ad hoc* ante-natal clinics for expectant mothers, and arranges for such mothers to be seen at infant welfare sessions where the number is not sufficiently large to justify the establishment of a separate clinic. Attendance at the ante-natal clinic held at Feltham increased to such an extent that it became necessary to arrange for a second session to be held each month from November. An additional centre with monthly sessions was approved for Hanworth, to be held in the village hall.

Other measures to which reference has been made in previous reports may be enumerated, viz., the provision of a central consultative ante-Natal clinic, attended by a consulting obstetrician, to which cases of difficulty may be referred from local ante-natal clinics, and arrangements for treatment in hospital of such cases as are recommended by the specialist; the employment of a consulting obstetrician to visit cases of difficult labour, puerperal fever and puerperal pyrexia and the provision of hospital accommodation for such patients as are found to need this; arrangements for the supply of sterilised maternity outfits from the welfare centres; arrangements for the bacteriological examination of specimens of pathological material where such investigation is deemed advisable, and financial assistance in certain cases towards the fees of midwives and towards the payment of home helps.

The position with regard to women employed as maternity nurses was considered to be less satisfactory, for whilst the number of practising midwives was adequate to serve the needs of the County, both as midwives and as maternity nurses, there was no doubt that a number of expectant mothers, for economic reasons, did not employ them in this latter capacity, but engaged instead untrained, or

partially trained, women to nurse them during labour and the puerperium, under the direction of a doctor. In order to remedy this position, it was decided that the Council's maternity and child welfare scheme should be extended to provide for financial aid to be afforded in appropriate cases towards the fees of certified midwives employed as maternity nurses.

A further improvement to the Council's maternity and child welfare scheme was introduced by an arrangement making the maternity-ward accommodation in the Council's general hospitals directly available to women attending the County Council's welfare centres, without the necessity of making application to a relieving officer. Expectant mothers who, in the opinion of the medical officer in charge of a welfare centre, should be admitted to hospital for confinement, either on medical grounds or by reason of their unsatisfactory home circumstances, are referred, through the central office of the Public Health Department, to the ante-natal clinic of the appropriate general hospital, with a view to admission to the maternity ward, so far as accommodation is available. The cost of this service is met out of the maternity and child welfare rate, and the contribution (if any) to be paid by the patient is assessed by the Maternity and Child Welfare Committee.

The following table gives comparative figures for the past five years of the attendances of women and children at the centres and the home visiting undertaken by health visitors. The figures for 1934 are not strictly comparable with those recorded in previous years, owing to the fact that the County Council ceased to carry out work in the District of Kingsbury after 1st April. The totals also include the work carried out by the County Council on behalf of the Urban District of Harrow from 1st April to 31st December (*see* page 43). These latter figures are shown in brackets and should be subtracted from the grand totals to ascertain the work carried out in the area remaining under the control of the County Council for maternity and child welfare purposes.

ATTENDANCES AT WELFARE CENTRES—HOME VISITS BY HEALTH VISITORS.

—				1931.	1932.	1933.	1934.	
							Grand Total.	Hendon Rural District.
<i>Ante-natal Clinics—</i>								
Number of sessions held	..	..		133	151	176	187	(11)
New cases attending	..	..		536	621	689	770	(43)
Total attendances made	..	..		1,169	1,389	1,502	1,856	(62)
<i>Welfare Centres—</i>								
Number of sessions held	..	..		2,188	2,218	2,240	2,273	(228)
New cases attending—								
Expectant mothers	..	..	..	329	530	470	477	(55)
Infants under 1 year of age	..	..		2,893	3,142	3,168	3,214	(490)
Children (1 to 5 years)	..	..		1,225	1,190	1,280	1,341	(153)
Total attendances made—								
Expectant mothers	..	..	..	2,071	2,073	2,069	1,918	(136)
Mothers attending with infants and children				69,750	80,550	90,031	85,751	(11,710)
Infants	..	..	..	47,516	53,796	60,324	56,959	(8,450)
Children (1 to 5 years)	..	..		39,669	46,154	52,798	52,656	(5,442)
Total attendances	..	..		159,006	182,573	205,222	197,284	(25,738)
Average attendance of infants and children each session				39.85	45.06	50.50	48.22	(60.93)
<i>Home visits made by Health Visitors—</i>								
Ante-natal visits	..	..	..	2,617	2,845	2,768	2,770	(184)
Visits to infants under 1 year	..	..		20,914	21,684	20,722	19,667	(1,618)
Visits to children (1 to 5 years)	..			24,870	27,830	27,405	24,555	(1,591)
Total home visits	..	..		48,401	52,359	50,895	46,992	(3,393)
Total number of visits to individual families	..	..	..	36,597	39,507	39,496	37,221	(2,756)

The tables on the following pages give particulars regarding the situation and times of sessions of the Council's ante-natal clinics and welfare centres, with the name of the medical officer in charge of each.



## COUNTY COUNCIL ANTE-NATAL CLINICS.

Districts.	Address of Centre.	Day and Time of Ante-Natal Session.	Medical Officer in Charge.
<i>Urban—</i>			
Feltham .. ..	The Hut, Council School .. ..	Second and last Monday in each month, 9.30 a.m. ..	Dr. Wilson
Friern Barnet .. ..	Whetstone—Congregational Church Hall, Oakleigh Road .. ..	Last Wednesday in each month, 9.30 a.m. ..	Dr. Campbell
Hayes and Harlington .. ..	Hayes—Townfield Road Council School .. ..	Every Wednesday, 9.30 a.m. ..	Dr. Shelley
	Harlington—Village Hall, Cherry Lane .. ..	Last Monday in each month, 9.30 a.m....	Dr. Moir
*Kingsbury .. ..	Church Hall, Bacon Lane .. ..	Last Friday in each month, 9.30 a.m. ..	Dr. Roberts
Staines .. ..	Ashford—Wesleyan Church School Room, Clarendon Road .. ..	Last Wednesday in each month, 9.30 a.m. ..	Dr. Wilson
	Staines—The Hut, Kingston Road Council School .. ..	Last Thursday in each month, 9.30 a.m. ..	Dr. Cellan-Jones
Sunbury .. ..	Congregational Church Hall, Rooksmead Road .. ..	Last Thursday in each month, 9.30 a.m. ..	Dr. Heddy
Uxbridge .. ..	109, High Street .. ..	Second and fourth Wednesdays in each month, 9.30 a.m. ..	Dr. Glyn-Jones
Yiewsley and West Drayton .. ..	Yiewsley—Central Hall, Fairfield Road .. ..	Last Tuesday in each month, 9.30 a.m. ..	Dr. Ruddy
	Harmondsworth—The Old School, Moor Lane .. ..	Last Monday in each month, 4.0 p.m. ..	Dr. Cellan-Jones
<i>Rural—</i>			
†Hendon .. ..	Headstone—St. George's Church Hall .. ..	Last Tuesday in each month, 9.30 a.m. ..	Dr. Burn

\* Transferred to Wembley Urban District Council on 1st April.

† ,, Harrow. The County Council continued to carry out maternity and child welfare functions in this district on behalf of the District Council until 31st January, 1935.

## COUNTY COUNCIL WELFARE CENTRES.

Districts.	Address of Welfare Centre.	Day of Meeting (2.30 p.m.).	Medical Officer in Charge.
<i>Urban—</i>			
Feltham .. ..	Bedfont—Public Hall, New Road ..	Monday ..	Dr. Moir.
	Feltham—The Hut, Council School ..	Tuesday ..	Dr. Wilson.
	Hanworth—Village Hall .. ..	Friday ..	Dr. Moir.
Friern Barnet ..	Congregational Church Hall, Bellevue Road.	Wednesday	} Dr. Poole.
	Freehold Social Institute, Hampden Road.	Friday	
	Whetstone—Congregational Church Hall, Oakleigh Road.	Tuesday ..	Dr. Campbell.
Hampton Wick ..	Baptist Mission, Upper Teddington Road.	Friday ..	Dr. Heddy.
Hayes and Harlington	Harlington — Village Hall, Cherry Lane.	Tuesday ..	Dr. Moir.
	Hayes—Queen's Hall, Station Road	{ Monday } { Thursday } { & Friday }	Dr. Shelley.
	Hayes—Townfield Road Council School	{ Tuesday & } { Wednesday }	Dr. Shelley.
*Kingsbury .. ..	Church Hall, Bacon Lane .. ..	{ Monday & } { Wednesday }	Dr. Roberts.
	Free Church, Slough Lane .. ..	Tuesday ..	Dr. Roberts.
Potters Bar ..	Potters Bar—Village Hall .. ..	Wednesday	} Dr. Campbell.
	South Mimms — St. Giles's Parish Room.	Thursday	
Ruislip-Northwood ..	Eastcote—Church Hall .. ..	Wednesday	} Dr. Hignett.
	Northwood — Methodist Assembly Room, Hallowell Road.	Tuesday	
	Ruislip—Church Room .. ..	Thursday	} Dr. Norrington.
	South Ruislip—Legion Hall, West End Road.	Monday ..	
Staines .. ..	Ashford — Wesleyan Church School Room, Clarendon Road.	{ Thursday } { & Friday }	Dr. Wilson.
	Staines—The Hut, Kingston Road Council School.	Tuesday 9.30 a.m.; Wednesday	Dr. Cellan-Jones.
	Stanwell—Women's Institute Hall ..	Monday ..	Dr. Cellan-Jones.
Sunbury .. ..	Ashford Common — The Pavilion, Spelthorne Sports Club.	Wednesday ..	Dr. Wilson.
	Upper Halliford—Church Hall ..	Thursday ..	Dr. Heddy.
	Shepperton—Council School ..	Tuesday ..	Dr. Cellan-Jones.
	Sunbury — Congregational Church Hall, Rooksmead Road.	Wednesday ..	Dr. Heddy.
Uxbridge .. ..	Colham Green—Mission Room ..	Wednesday ..	Dr. Glyn-Jones.
	Harefield—Memorial Hall .. ..	Thursday ..	Dr. Norrington.
	Hayes End — Salem School, High Road.	Monday	} Dr. Glyn-Jones.
	Hillingdon West—St. Andrew's Hall ..	Thursday	
	Ickenham—Village Hall .. ..	Tuesday ..	Dr. Norrington.
	Uxbridge—109, High Street .. ..	{ Tuesday & } { Friday }	Dr. Glyn-Jones.
Yiewsley and West Drayton	Harmondsworth—Old School, Moor Lane.	Thursday ..	Dr. Cellan-Jones.
	Yiewsley—Central Hall, Fairfield Road	{ Tuesday & } { Friday }	Dr. Ruddy.
<i>Rural—</i>			
†Hendon .. ..	Harrow Weald—Memorial Hall ..	{ Monday & } { Thursday }	Dr. Burn.
	Headstone—St. George's Church Hall	{ Tuesday & } { Wednesday }	Dr. Burn.
	Pinner—Free Church Lecture Hall, Payne's Lane.	Friday .. ..	Dr. Norrington.
	Stanmore—Whitchurch Institute, Whitchurch Lane.	Friday .. ..	Dr. Roberts.

ø Opened January, 1934.

\* Transferred to Wembley Urban District Council, 1st April, 1934.

† „ Harrow „ „ „ „ The County Council continued the maternity and child welfare functions in this district on behalf of the Harrow Council until 31st January, 1935.



The following table gives information as to the cost of fresh and dried milk, &c., issued at the centres during the *financial* year ended 31st March, 1935.

Year 1934-35.	Amount.	Cost Price.	Contributed by Mothers.	Charge on Scheme.
		£   s.   d.	£   s.   d.	£   s.   d.
Fresh milk            ..    ..    ..	225,000 pts. (approx.)	3,054 15   1	—	3,054 15   1
Dried milk            ..    ..    ..	26,465 lbs.	1,991   8   2	1,615   4   4	346   3   10
Virol, cod-liver oil, malt, &c.    ..	16,425 lbs.	973   4   8	750 19   0	222   5   8
	Totals            ..	6,019   7   11	2,396   3   4	3,623   4   7

The net cost to the County Council shows a decrease of £685 6s. 6d. on the net cost for the financial year 1933-34.

*Ophthalmic Treatment.*—Two part-time ophthalmic surgeons have been appointed by the Education Committee under the County Council’s scheme for the treatment of school children and their services also are available for the treatment of certain cases referred from the welfare centres. If the parents’ circumstances permit, they are required to pay the cost price of any spectacles supplied, together with a charge of 1s. for examination and fitting.

*Dental Treatment.*—At the dental clinics established for school children by the Education Committee, treatment is provided for expectant and nursing mothers, or children below school age, who are referred on account of oral sepsis or dental caries.

During the financial year, 1934-35, the sum contributed towards the cost of dental treatment, including the supply of dentures, was £329 13s. 10d., while the actual cost of the dentures only was £308 15s. 0d.

The following table gives particulars of the dental work which has been carried out during the year under the Council’s Maternity and Child Welfare scheme :—

—	Mothers.	Children under 5 years of age.
Number inspected            ..    ..    ..	456	451
„   of attendances made    ..    ..    ..	2,455	899
„   treated            ..    ..    ..	352	404
„   extractions (gas)            ..    ..    ..	1,430	961
„   „            (local anæsthetic) ..    ..    ..	1,989	327
„   other treatment (fillings, &c.) ..    ..    ..	1,811	1,088
„   dentures completed        ..    ..    ..	350	—

There is in operation an agreement between the County Council and the local authorities concerned, whereby the dental treatment of expectant and nursing mothers and of children below school age attending welfare centres in Southall-Norwood and Southgate, and of children only in Teddington, is undertaken at the County Council’s dental clinics, and the work carried out under these agreements is included in the above table. The agreement with Southgate Borough Council was terminated by the Borough Council in June.

*Treatment of Ophthalmia Neonatorum.*—Arrangements are in force whereby infants suffering from ophthalmia neonatorum may be admitted to St. Margaret’s Hospital, Kentish Town, one of the hospitals included in the Special Hospitals Service of the London County Council. During 1934. 15 cases of ophthalmia neonatorum were notified in the area of the County for which the County Council is the authority for maternity and child welfare. Of these, 3 related to infants born in the maternity hospital belonging to the Willesden Borough Council, which is situated in Kingsbury.

Of the remaining twelve cases, nine were treated in hospital and three at home. One infant removed from the district while still under treatment and the remainder made satisfactory recoveries with no apparent injury to vision.

*Treatment of Puerperal Fever and Puerperal Pyrexia.*—The advice of Mr. J. M. Wyatt, F.R.C.S., the County Council's consultant, was sought on six occasions, on one of which a special visit was paid to the patient's home in consultation with the medical practitioner in attendance. Ten women were admitted, under arrangement with the London County Council, to wards at the North Western Hospital reserved for the treatment of puerperal infection, under the care of Mr. Wyatt. Of this number, eight made satisfactory recoveries, one was found to be suffering from pulmonary tuberculosis and was transferred to one of the County Sanatoria and one died.

*Provision of Midwives.*—The districts of Harefield and Ruislip-Northwood and of Yiewsley and West Drayton are not well supplied with privately practising midwives and the County Council employs two whole-time midwives to meet the needs of women in these areas.

Grants were made in the financial year commencing 1st April, 1934, to certain district nursing associations which provide midwifery services, viz., Harmondsworth £25, Stanwell £25, and Potters Bar and Bentley Heath £50.

*Central Consultative Ante-natal Clinic.*—Monthly sessions of this clinic, which is under the direction of Dr. J. S. Fairbairn, F.R.C.P., were held in the Public Health Department, 10, Great George Street, Westminster, during the year. Thirty-one new cases, referred to the clinic for examination from the local centres or private practitioners, and six old cases made a total of forty-six attendances.

Three women were referred to the appropriate out-patient department of St. Thomas's Hospital for further investigation of their condition, and several were admitted to the wards of that hospital, or to one of the Council's general hospitals, for treatment of a disorder of pregnancy or for their confinements. In all other cases appropriate advice was given, and Dr. Fairbairn's opinion communicated to the doctor in charge of the case.

*Investigation of Maternal Deaths.*—During the course of the year Dr. Back carried out investigations into the deaths of 16 women who died in childbirth in the districts in Middlesex in which the County Council has agreed to undertake this enquiry. In each case a detailed report was forwarded to the Ministry of Health.

#### CHILDREN AND YOUNG PERSONS ACTS.

At the beginning of the year the County Council's register contained the names of 162 foster-parents, having in their care 227 children. During the year 79 additional foster-parents notified their intention of undertaking for reward the nursing and maintenance of infants, and 71 foster-parents notified that they had ceased to have infants in their care. Notifications of the reception of 234 infants, of the removal of 188 from the care of foster-parents, and of the deaths of seven infants were received.

With the transference to the Urban Districts of Harrow and Wembley of the maternity and child welfare functions previously performed by the County Council in the late Hendon Rural District and Kingsbury, respectively, the duties of infant life protection passed out of the hands of the County Council in these two areas on 1st April, 1934. At the request of the Harrow Urban District Council, however, the County Council continued to carry out this work in the old Hendon Rural District until the close of the year.

During 1934 the Council's health visitors, in their capacity of infant protection visitors, paid 234 first visits and 1,249 subsequent visits to the homes of foster-children. In 27 instances visits were made by Dr. Marjorie Back in connection with special enquiries it was considered necessary to make with regard to certain foster-children.



### Inspection and Supervision of Food.

The acts and regulations dealing with the supervision of food supplies which are administered by the County Council deal with (a) certain powers and duties connected with the production of milk and (b) adulteration of food.

#### MILK PRODUCTION.

(1) *The Milk and Dairies (Consolidation) Act, 1915.*—For a number of years past the County Council has arranged for the routine collection of samples of milk from Middlesex producers and retailers, and for the examination of such samples by animal inoculation at the Lister Institute of Preventive Medicine. The objects of this investigation, which proceeds continuously week by week throughout the year, are to ascertain to what extent the milk supply of the County contains living tubercle bacilli, and to take such steps as may be possible for the improvement of the position.

During the year 297 samples were taken and forwarded to the Lister Institute. In 8 instances no definite result was obtainable, owing to the premature death, from some intercurrent infection, of the guinea-pigs inoculated; of the remaining 289 specimens, in which investigation was able to be carried to a conclusion, living tubercle bacilli were found in 17—equivalent to 5·9 per cent.

Of the 289 samples taken, three were of “Grade A, T.T.” milk and seven of “Grade A” milk. In none of these designated milks were tubercle bacilli detected.

The following table shows the results which have been obtained since the year 1927:—

Year.	Number of samples for which a definite result was obtained.	Number containing living tubercle bacilli.	Percentage of tubercle-infected milk.
1927 . . . . .	272	28	10·3
1928 . . . . .	228	23	10·1
1929 . . . . .	277	21	7·6
1930 . . . . .	272	22	8·1
1931 . . . . .	256	14	5·5
1932 . . . . .	266	31	11·6
1933 . . . . .	287	25	8·7
1934 . . . . .	289	17	5·9

It is satisfactory to observe that the proportion of samples of milk found to be tubercle-infected has declined to a lower level than was the case in the years 1932 and 1933. There is reason to think that the very unsatisfactory figures for those years were not unconnected with the national financial position and the acute depression in the agricultural industry. This point has been the subject of comment in previous annual reports.

Of the 17 infected milks found in 1934, 11 were stated to have been produced in Middlesex, and 6 in other counties. Diseased animals were traced on 11 of the farms concerned (8 in Middlesex, 3 in other counties) and 14 cows were slaughtered by the County Councils under the powers conferred by the Tuberculosis Order, 1925. In the case of the 6 remaining farms, no evidence of bovine tuberculosis could be detected on veterinary examination of the herds, but in three instances it was found that 4 cows in poor condition had been disposed of for slaughter in the interval between the taking of the samples and the date, some weeks later, when the results of the biological examinations were received.

In Willesden for many years past the Borough Council has carried out routine examination for tubercle bacilli of milk retailed within the borough. The Medical Officer of Health informs me that during the year, 48 samples of milk, taken from Willesden retailers, were examined for the presence of tubercle bacilli by animal inoculation. Six of the samples, all of which had been produced outside Middlesex, were found to contain living tubercle bacilli (12·5 per cent.).

(2) *Milk and Dairies Order, 1926.*—Following the retirement of Mr. Sidney Villar, F.R.C.V.S., at the close of 1932, after an interval of twelve months, Mr. Reginald Wooff, M.R.C.V.S., was appointed on the staff of the County Council as whole-time veterinary inspector under the Milk and Dairies Order. Since Mr. Wooff's appointment, the system commenced some years ago has been continued whereby every milch herd in the county is visited, and every animal subjected to a clinical examination four times a year. In addition, the veterinary inspector makes such special visits to farms as may appear to him to be desirable. The following is Mr. Wooff's report upon his first year's work in Middlesex:—

“I submit a report of my work since my appointment on January 17, 1934. The first report is always difficult, as it does not show the basic amount of work carried out. The early part of the year was occupied in making examinations wherever possible, whilst finding my way, obtaining and compiling lists of the farms in each district, and, above all, in getting to know the farmers. It gives



me very great pleasure to be able to state that everywhere I have been I have had every consideration shown me by the farmers, and I believe I have their confidence. To do this, frequently meant spending a fair amount of time with each farmer, but the future will show the benefit of this by a much closer co-operation than might otherwise have been the case. Travelling during the early part of the year was frequently hampered by fog, as the roads in the County were new to me, but this, I hope, will not be so serious in future.

“ Although some farms have been built upon, other farmers have taken up the production of milk, and the number is increasing. Unfortunately, in this County, there are very few farms which have room to rear their own stock; thus there is a continual introduction of fresh cows into most herds, so that it is essential that inspections should take place as frequently as possible. There is no doubt but that a “ self-contained ” herd is always the soundest and should be advocated whenever practicable.

“ It has been possible to make a clinical examination of approximately 13,000 cows, and during these examinations 28 cows were found to be suffering from tuberculosis as defined under the Tuberculosis Order of the Ministry of Agriculture. Of these, 11 were suffering from tuberculosis of the udder, whilst 17 were affected under the other sections of the Order, and were dealt with by the appropriate local veterinary inspectors. These numbers are over and above those cases which were reported by the owners direct, as the general symptoms to look for are always pointed out and owners are reporting suspected cases at an earlier stage than hitherto.

“ The provision of an electric centrifuge has enabled me to examine all the specimens that I have taken, and been the means of discovering infected milk in a very much shorter time than would be possible otherwise. Every advantage has been taken of using the laboratory, and during this period 175 samples of milk and sputum were examined. Of these I found 11 samples of milk to contain tubercle bacilli, and 6 samples of sputum to be likewise affected. These animals were dealt with under the Tuberculosis Order by the local veterinary inspectors, and post-mortem examination confirmed the diagnosis in each case. There have also been some 17 cases of suspected tuberculosis found during the inspections, and such animals are reported to the appropriate local veterinary inspector.

“ One very striking fact stands out as the result of these microscopical examinations, and that is the large percentage of streptococcal infection. This is very noticeable after working in Herefordshire, where the percentage is small. I attribute this mainly to the fact that the milking cows are kept out much longer in Herefordshire, and are thus healthier. I am hoping to be able to reduce the incidence of streptococcal infection in this County, as the wastage causes too much loss—in fact some farmers are beginning to take steps to this end already. It is recognized by most farmers that milk thus infected cannot be used, and I have had no difficulty as regards the use of this milk being stopped.

“ The general condition of the cows has been satisfactory on the whole, especially considering the dryness of the summer, but here and there the herds are not up to standard. This fact has been pointed out, and I hope an improvement will take place. Wherever there has been a cow that has showed symptoms of disease that was incurable—such as John’s—I have always found the owner agreeable to taking advice to prevent further infection of his herd.

“ During the year there have been two schemes promoted for the improvement of the milk supply of the nation, namely the attested and the accredited schemes, the first starting on February 1st, and the latter May 1st, 1935. They are undoubtedly two great steps in the right direction, although it will probably mean extra work.

“ Owing to the comparative short time since my appointment, it is difficult to estimate the amount of infection in cows in the County, but I hope the next report will show a greatly increased number of examinations, with consequently a fuller report.”

From the above report it will be observed that the County Council’s whole-time veterinary inspector was instrumental in removing 28 tuberculosis cows from Middlesex herds in the course of the year. In addition he took measures to stop the sale of milk in a large number of other instances in which various unhealthy conditions of the cows were detected by him.

(3) *The Milk (Special Designations) Order, 1923.*—Licences for the production of “ Certified ” milk were granted by the Ministry of Health to four Middlesex milk producers during the year; the licensed farms being situated in the Borough of Finchley and the Urban Districts of Enfield, Ruislip-Northwood and Wembley.

Four dairymen were granted licences by the County Council to produce “ Grade A ” milk; the farms concerned are situated in the Urban Districts of Harrow (2), Potters Bar and Ruislip-Northwood.

(4) *The Tuberculosis Order, 1925.*—This Order of the Ministry of Agriculture is administered by the Diseases of Animals Sub-Committee of the County Council. The Clerk of the County Council informs me that during 1934, visits were made by the Council’s part-time veterinary surgeons to 86 premises on which bovine tuberculosis had been reported or was suspected. Veterinary examination of 1,618 animals was carried out and 87 animals were found to be suffering from tuberculosis as defined by the Order and were slaughtered. A sum of £626 12s 6d., was paid by the County Council by way of compensation to the owners of the cows slaughtered (75 per cent of this amount is repayable by the Ministry of Agriculture).



ADULTERATION.

The Acts and Regulations dealing with adulteration of food are administered by the Public Control Department of the County Council. I am indebted to Mr. R. A. Robinson, Barrister-at-Law, Chief Officer of the Public Control Department, for the information regarding this branch of work.

*Foods and Drugs (Adulteration) Act, 1928.*—In the following table are set out particulars of samples submitted to the County Analyst by officers of the Public Control Department during 1934 :—

Food or Drug.	Number of samples examined.	Number of samples adulterated or not up to standard.
Aspirin .. .. .	1	—
Brandy .. .. .	2	—
Bread .. .. .	2	—
*Butter .. .. .	30	—
Cheese .. .. .	1	—
*Cherries .. .. .	1	—
Chocolate couverture .. .. .	1	1
Cocoa .. .. .	1	—
Coffee .. .. .	1	—
Coffee seasoning .. .. .	1	—
*Cream pastry .. .. .	39	22
*Cream .. .. .	2	—
Flour .. .. .	1	—
Gin .. .. .	7	5
*Grape fruit crush .. .. .	1	—
Hake .. .. .	14	14
*Honey .. .. .	2	—
*Jam .. .. .	1	—
Lemon sole .. .. .	6	6
Lemonade powder .. .. .	1	—
*Meat .. .. .	3	—
*Meat pies .. .. .	2	—
*Milk .. .. .	1,188	65
*Milk, sterilized .. .. .	34	—
*Minced beef .. .. .	7	5
Olive oil .. .. .	1	—
Orangeade .. .. .	1	—
Paraffin wax .. .. .	1	—
*Preservative powder .. .. .	1	—
Rum .. .. .	9	5
*Sausages .. .. .	8	3
Vinegar .. .. .	1	—
Whisky .. .. .	12	7
Totals .. .. .	1,383	133

In addition to the above, 2,679 samples were examined during the year by officers of the Public Control Department.

During the year, 40 prosecutions were instituted in respect of the following articles of food :—  
Chocolate covering, 1 ; cream pastry, 1 ; gin, 2 ; hake, 9 ; lemon sole, 4 ; milk, 15 ; minced beef, 4 ; rum, 1 ; sausages, 2 ; whisky, 1.

*Public Health (Preservatives, &c., in Food) Regulations, 1925 and 1927.*—In the foregoing table, articles marked \* were also examined for the presence of preservatives.

*Public Health (Dried Milk) Regulations, 1923 and 1927.*  
*Public Health (Condensed Milk) Regulations, 1923 and 1927.*  
No action was taken under these Regulations during the year.

**Infectious Diseases.**

## NOTIFIABLE DISEASES OTHER THAN TUBERCULOSIS.

**SMALLPOX.**—Only one case of smallpox occurred in Middlesex during 1934, as compared with 12 cases in 1933, 25 cases in 1932, 14 cases in 1931, 271 cases in 1930 and 80 cases in 1929. The sole case which arose in 1934 was that of a man aged 52, a resident of Wembley, who suffered from a mild attack of the disease and after a stay of three weeks in hospital completely recovered and was discharged. He had been vaccinated in infancy but not revaccinated.

**SCARLET FEVER.**—Scarlet fever continued to be unduly prevalent during 1934, the incidence being even greater than in the previous year and the highest recorded since 1921. During the year, the number of notifications of scarlet fever in Middlesex was 7,459, an increase of 1,144 above the figure for 1933, which itself was a year of unusually high prevalence. The incidence-rate of the disease for the year 1934 was 4·12 per 1,000 persons living. The number of persons dying from scarlet fever in 1934 was 40 (of these 35 were children below the age of 15 years), corresponding to a case-mortality rate of 0·54 per cent. and a death-rate from scarlet fever of 0·02 per 1,000 persons living. A similar rate was recorded in London, in England and Wales and the Great Towns. The sanitary districts in the County in which the incidence of scarlet fever was greatest were :—Yiewsley and West Drayton (9·08) ; Staines (7·77) ; Edmonton (6·51) ; Hendon (5·99), and Wood Green (5·41).

**DIPHTHERIA.**—The incidence of diphtheria was appreciably higher than in either of the two preceding years. During the year, 2,282 cases were notified (an increase of 616 upon the figure for 1933), corresponding to an incidence-rate of 1·26 per 1,000 persons living. One hundred and eight deaths from diphtheria occurred (102 were children below the age of 15), corresponding to a case-mortality rate of 4·73 per cent. The death-rate from diphtheria per 1,000 persons living was 0·06 for Middlesex, 0·10 for England and Wales and 0·11 for London and the Great Towns. The districts in Middlesex in which the incidence of diphtheria was greatest in 1934 were :—Sunbury, 4·28 ; Twickenham, 2·78 and Staines, 2·63 per thousand of the population.

A number of sanitary authorities in Middlesex have instituted schemes for the immunisation of individuals to diphtheria by inoculation with some form of diphtheria toxin. In other districts schemes are in contemplation. So far as the County Council is concerned, approval has been given to the immunisation of the children, several hundreds in number, who are maintained by the County Council under public assistance powers in grouped or scattered homes ; subject in every case to the written consent of the parent, if living.

**ENTERIC FEVER.**—Only 33 cases were notified of diseases of the enteric group (typhoid and the paratyphoid fevers), with six deaths. This is a most remarkably low figure for a community of over one and three-quarter million persons and reflects most favourably upon the water-supply, sewerage and general sanitary conditions of the districts comprising the County of Middlesex. The figures correspond to a case-rate of 0·02, a death-rate of 0·003 per 1,000 persons living and a case-mortality rate of 18·2 per cent.



The following table gives statistical information regarding scarlet fever, diphtheria and enteric fever in each district of the county.

COUNTY AND DISTRICT RATES, 1934.  
*Scarlet Fever, Diphtheria, Enteric Fever.*

Districts.	Number of cases notified, with case-rate per 1,000 living. Number of deaths recorded, with death-rate per 1,000 living.											
	Scarlet Fever.				Diphtheria.				Enteric Fever.			
	Cases Notified.		Deaths Recorded.		Cases Notified.		Deaths Recorded.		Cases Notified.		Deaths Recorded.	
	No.	Rate.	No.	Rate.	No.	Rate.	No.	Rate.	No.	Rate.	No.	Rate.
Acton ( <i>Borough</i> )	236	3·40	1	0·01	84	1·21	7	0·10	3	0·04	1	0·01
Brentford and Chiswick ( <i>Borough</i> )	225	3·58	—	—	62	0·99	3	0·05	—	—	1	0·02
Ealing ( <i>Borough</i> )	490	3·66	2	0·01	194	1·45	8	0·06	3	0·02	—	—
Edmonton ..	594	6·51	2	0·02	103	1·13	6	0·07	—	—	1	0·01
Enfield ..	254	3·40	—	—	35	0·47	—	—	1	0·01	—	—
Feltham ..	71	3·41	—	—	37	1·78	6	0·29	—	—	—	—
Finchley ( <i>Borough</i> )	175	2·84	1	0·02	30	0·49	2	0·03	1	0·02	—	—
Friern Barnet ..	71	2·94	—	—	14	0·58	1	0·04	—	—	—	—
Hampton ..	20	1·48	—	—	17	1·26	—	—	—	—	—	—
Hampton Wick..	3	1·01	—	—	—	—	—	—	—	—	—	—
Harrow-on-the-Hill	34	4·00	1	0·12	2	0·24	—	—	—	—	—	—
Harrow ..	553	4·77	7	0·06	73	0·63	8	0·07	7	0·06	1	0·01
Hayes and Harlington	109	3·67	—	—	35	1·18	2	0·07	—	—	—	—
Hendon ( <i>Borough</i> )	785	5·99	3	0·02	158	1·21	3	0·02	4	0·03	—	—
Heston and Isleworth ( <i>Borough</i> )	388	4·43	2	0·02	100	1·14	4	0·05	2	0·02	—	—
Hornsey ( <i>Borough</i> )	282	2·96	2	0·02	64	0·67	4	0·04	1	0·01	—	—
Potters Bar ..	35	4·08	—	—	7	0·82	—	—	—	—	—	—
Ruislip-Northwood	56	2·64	2	0·09	14	0·66	1	0·05	1	0·05	—	—
Southall-Norwood	183	3·92	2	0·04	87	1·86	1	0·02	—	—	—	—
Southgate ( <i>Borough</i> )	166	2·77	—	—	43	0·72	4	0·07	—	—	—	—
Staines ..	195	7·77	—	—	66	2·63	1	0·04	—	—	—	—
Sunbury ..	44	3·04	—	—	62	4·28	2	0·14	—	—	—	—
Teddington ..	37	1·61	—	—	14	0·61	3	0·13	—	—	—	—
Tottenham ..	627	4·11	3	0·02	301	1·97	12	0·08	1	0·01	—	—
( <i>Borough</i> )												
Twickenham ( <i>Borough</i> )	106	2·44	3	0·07	121	2·78	3	0·07	—	—	1	0·02
Uxbridge ..	89	2·51	1	0·03	47	1·33	1	0·03	—	—	—	—
Wealdstone ..	34	4·43	1	0·13	5	0·65	—	—	—	—	—	—
Wembley ..	361	3·93	1	0·01	84	0·91	5	0·05	1	0·01	—	—
Willesden ( <i>Borough</i> )	811	4·31	4	0·02	365	1·94	18	0·10	7	0·04	1	0·01
Wood Green ..	291	5·41	—	—	31	0·58	3	0·06	1	0·02	—	—
( <i>Borough</i> )												
Yiewsley and West Drayton	134	9·08	2	0·14	27	1·83	—	—	—	—	—	—
THE COUNTY ..	7,459	4·12	40	0·02	2,282	1·26	108	0·06	33	0·02	6	0·003

DYSENTERY.—Five cases were notified in 1934, four of these occurring in the London County Council's Mental Hospital at Hanwell.

CEREBRO-SPINAL FEVER.—Thirty-two cases were notified in the course of the year, thirteen of these occurring in the Borough of Willesden. Nineteen cases were fatal and fifteen of the deaths were of children below the age of 15 years.

PNEUMONIA.—One case of influenzal pneumonia and 1,657 cases of primary pneumonia were notified during the year, the lowest annual figure since 1930. The number of notifications was less by 352 than the total for 1933. Nearly one half of the total number of cases, viz., 808, occurred in the first quarter of the year. The number of deaths from all forms of pneumonia during 1934 was 1,123, corresponding to a death-rate from the disease of 0·62 per 1,000 persons living, compared with 1,118 deaths and a death-rate of 0·64 in 1933.

ENCEPHALITIS LETHARGICA.—Sixteen deaths from this disease or its sequelæ were recorded. Five new cases were notified.

ACUTE POLIOMYELITIS AND POLIOENCEPHALITIS.—The numbers of notifications received of these two conditions were 21 and 2 respectively. No deaths were recorded.

MEASLES.—The compulsory notification of measles is operative in only a few districts in the County, so that accurate information of the incidence of the disease is not available. The mortality from measles, however, is an indirect measure of its incidence, and the following table shows the annual number of deaths from measles in Middlesex during the past 10 years :—

Year.				Deaths.	Year.				Deaths.
1925	..	..	..	27	1930	..	..	..	135
1926	..	..	..	160	1931	..	..	..	16
1927	..	..	..	4	1932	..	..	..	133
1928	..	..	..	216	1933	..	..	..	6
1929	..	..	..	6	1934	..	..	..	143

The biennial fluctuation, which is characteristic of measles, is well shown.

OPHTHALMIA NEONATORUM.—The number of notifications received during 1934 was 149, or a case-rate of 5·65 per 1,000 births.

PUERPERAL FEVER AND PUERPERAL PYREXIA.—Notifications of 156 cases of puerperal fever (5·91 per 1,000 births) and 292 cases of puerperal pyrexia (11·1 per 1,000 births) were received during 1934. The corresponding figures for the year 1933 were as follows :—

- Puerperal fever, 110 notifications (4·5 per 1,000 births).
- Puerperal pyrexia, 314 notifications (12·8 per 1,000 births).

The continued comparatively high incidence of puerperal infection may be associated with the prevalence of streptococcal infections, evidenced by the large number of cases of scarlet fever and erysipelas which occurred in 1934.

The number of deaths recorded in the county due to puerperal sepsis was 46, equivalent to a maternal mortality rate from sepsis of 1·74 per 1,000 live births, as compared with 2·12 in 1933. The corresponding rate for the country as a whole was 2·03 in 1934, as compared with a rate of 1·79 in the preceding year.

ERYSIPELAS.—During the last few years the incidence of erysipelas has been considerably higher than formerly was the case. In 1934 the number of cases notified, viz., 769, was the highest on record, and showed an increase of 66 cases as compared with 1933.

For the preceding years the figures were : 1933, 703 ; 1932, 573 ; 1931, 519 ; 1930, 568 ; 1929, 521 ; 1928, 525 ; 1927, 351 ; 1926, 395.

MALARIA.—Ten cases of malaria were notified ; in eight instances infection was considered to have been contracted abroad, and in one case the disease had been induced for therapeutic purposes.

CHOLERA, PLAGUE, TYPHUS FEVER, MALTA FEVER, ANTHRAX.—No cases of any of these diseases were notified.

PUBLIC VACCINATION.

Fees payable to Public Vaccinators.—During the year the subject of payment of fees to Public Vaccinators was under consideration. The late Boards of Guardians did not all adopt the same scale of fees, with the result that there were anomalies in the County. In a number of instances a public vaccinator in one district was paid on a different basis from the vaccinator in the adjoining district.

The County Council received a deputation from the British Medical Association on the subject, and, after careful consideration of the arguments advanced by the deputation in favour of a scale of fees in excess of the minimum laid down in the Vaccination Order, 1930, the County Council adopted the following scale, which now is in operation :—



	s.	d.
(a) In respect of a child whose birth has been registered in the vaccinator's district or who is resident therein (in certain cases) .. .. .	1	6
(b) Successful vaccination at the vaccinator's surgery or elsewhere than at the home of the person vaccinated .. .. .	2	6
(c) Successful re-vaccination at the vaccinator's surgery or elsewhere than at the home of the person vaccinated .. .. .	2	6
(d) Successful vaccination at the home of the person vaccinated .. .. .	5	0
(e) Successful re-vaccination at the home of the person re-vaccinated .. .. .	5	0

The table on page 57 has been compiled from annual returns of vaccination officers, and relates to births registered during the year 1933, the figures for that year being the latest available.

The results as at 31st January, 1935, may be summarised as follows:—

Births registered during 1933 .. .. .	21,203*
Infants successfully vaccinated .. .. .	8,852
Infants insusceptible to vaccination .. .. .	102
Infants who had had smallpox .. .. .	1
Statutory declarations of conscientious objection .. .. .	8,294
Infants died unvaccinated .. .. .	812
Vaccination postponed by medical certificates .. .. .	356
Removals to other districts .. .. .	943
Removals to places unknown, &c. .. .. .	945
Otherwise unaccounted for .. .. .	898

\* This figure does not include re-registered births or cases of children born in other districts.

Of 21,203 infants whose births were registered in Middlesex during 1933, 812 died unvaccinated. Of the remainder, viz., 20,391, only 8,954 (43·91 per cent.) were successfully vaccinated or were certified to be insusceptible to smallpox or vaccination. Statutory declarations of conscientious objection were made in respect of no fewer than 8,294 infants (40·67 per cent.), whilst 3,142 infants were not vaccinated for various other reasons (postponement on medical certificate, removal, &c.).

The vaccination laws of this country are antiquated and now bear little relation to present-day needs. Radical amendment to the existing system is eminently desirable. The machinery of administration of the Vaccination Acts and Orders is cumbersome in the extreme and costly. It is irritating to the public and inasmuch as it permits over half the population to remain unprotected against smallpox, to that extent it fails in its purpose. If vaccination is to be compulsory, the law should so provide; if not, the practice should be placed upon an entirely voluntary basis. The present system, which, whilst simulating compulsion, leaves such wide loopholes for evasion, can only be described as entirely unsatisfactory.

VACCINATIONS PERFORMED BY PUBLIC VACCINATORS DURING 1934.

Vaccination District or Poor Law Institution.	Vaccinations.			Successful re-vaccinations.
	Under 1 Year.	1 Year and upwards.	Totals.	
North Middlesex Hospital and Edmonton House	4	1	5	4
Enfield House .. .. .	—	3	3	—
Chase Farm Schools .. .. .	3	—	3	—
Edmonton (North) .. .. .	170	13	183	8
Edmonton (South) .. .. .	118	12	130	2
Enfield (Cooper's Lane) and Enfield Town .. .. .	98	8	106	6
Enfield Highway and Ponders End .. .. .	92	3	95	3
Tottenham (High Cross) .. .. .	68	11	79	—
Tottenham (Lower, East) .. .. .	83	5	88	3
Tottenham (Lower, West) .. .. .	51	15	66	3
Tottenham (West Green) .. .. .	158	42	200	26
Finchley (North) .. .. .	32	5	37	3
Finchley (South) .. .. .	22	3	25	2
Friern Barnet .. .. .	16	6	22	1
Highgate .. .. .	70	12	82	14
Hornsey (Harringay) .. .. .	187	23	210	12
Southgate and Enfield (Cockfosters) .. .. .	132	9	141	8
South Mimms .. .. .	22	2	24	1
Winchmore Hill .. .. .	43	1	44	—
Wood Green .. .. .	179	27	206	10
Burnt Oak and Watling Estate .. .. .	84	17	101	3
Child's Hill .. .. .	24	8	32	7
Edgware, Little Stanmore and Lower Hale .. .. .	95	6	101	3
Erschine Hill Residential School (L.C.C.) .. .. .	—	—	—	—

Vaccination District or Poor Law Institution.	Vaccinations.			Successful re-vaccinations.
	Under 1 Year.	1 Year and upwards.	Totals.	
Golders Green and Hampstead Garden Suburb ..	50	4	54	1
Great Stanmore and Harrow Weald .. ..	53	1	54	—
Harrow-on-the-Hill .. .. .	73	8	81	17
Hendon (Central) and Hendon (West) (part) ..	199	8	207	11
Kingsbury .. .. .	107	8	115	4
Mill Hill (part) .. .. .	65	8	73	13
Pinner .. .. .	60	—	60	2
Redhill County Hospital and Institution .. ..	187	—	187	1
Wealdstone .. .. .	84	14	98	7
Wembley .. .. .	154	19	173	6
Central Middlesex County Hospital .. ..	1	4	5	5
Harlesden .. .. .	470	59	529	43
Kilburn .. .. .	483	15	498	13
Acton .. .. .	228	16	244	9
Children's Home, Hillingdon (Bartram Lodge) ..	—	—	—	—
Cowley and Hillingdon .. .. .	316	11	327	1
Ealing (part) and West Twyford .. .. .	155	11	166	11
Hanwell and Ealing (part), Greenford and Perivale	302	19	321	9
Harefield .. .. .	37	—	37	1
Hayes .. .. .	96	17	113	2
Hillingdon County Hospital .. .. .	1	2	3	—
Northolt .. .. .	39	1	40	2
Norwood .. .. .	174	19	193	8
Ruislip .. .. .	108	3	111	12
Uxbridge and Ickenham .. .. .	5	1	6	—
Yiewsley and West Drayton .. .. .	55	7	62	—
Ashford .. .. .	98	6	104	—
Ashford Residential School (L.C.C.) .. ..	—	—	—	—
Bedfont, Feltham and Hanworth .. .. .	136	3	139	2
Brentford .. .. .	116	10	126	11
Chiswick .. .. .	229	49	278	7
Cranford, Harlington and Harmondsworth (Sipson and Heathrow).	45	1	46	—
Hampton .. .. .	40	1	41	1
Hampton Hill (S. James) .. .. .	28	—	28	3
Hampton Wick .. .. .	11	—	11	—
Harmondsworth (Longford) and Stanwell .. ..	46	—	46	—
Heston, Isleworth (part) .. .. .	256	2	258	11
Isleworth (part) .. .. .	154	13	167	2
Laleham and Staines .. .. .	38	6	44	—
Shepperton and Littleton .. .. .	31	—	31	4
Staines Institution .. .. .	—	—	—	—
Sunbury .. .. .	5	2	7	—
Teddington .. .. .	157	7	164	7
Twickenham .. .. .	229	13	242	9
Warkworth House, Isleworth .. .. .	4	1	5	—
West Middlesex County Hospital .. .. .	—	—	—	—
Totals .. .. .	6,876	601	7,477	354



RETURN OF VACCINATION OFFICERS RELATING TO BIRTHS REGISTERED IN 1933.

Registration Sub-Districts comprised in the Vaccination Officer's District.	Vaccination Officers.	Number of Births registered from 1st January to 31st December, 1933.	Number of these Births duly entered by 31st January, 1935, in Vaccination Register, viz. :—				Number of these Births which, on 31st January, 1935, remained unentered in the Vaccination Register on account of—			Number of these Births remaining on 31st Jan., 1935, neither entered in the Vaccination Register nor temporarily accounted for.	Number of Certificates of successful Primary Vaccination of children under 14 received during 1934.	Number of Statutory Declarations of conscientious objection actually received during 1934.
			Success-fully Vaccinated.	In-susceptible to Vaccina-tion.	Had Small Pox.	Statutory Declara-tions of con-scientious objection.	Died un-vaccinated.	Post-ponement by Medical Certificate.	Removal to other Districts.	Removal to places to which unknown and cases not found.		
Edmonton	T. E. David	2,138	474	4	—	1,145	151	13	145	106	100	1,172
Enfield	R. W. Perring	784	216	2	—	396	22	—	8	36	104	404
Tottenham, East	L. J. Atherton	828	176	6	—	461	35	11	10	24	105	765
Tottenham, West	"	581	142	1	—	330	15	3	5	12	73	
Finchley	S. M. Baldock	633	199	—	—	353	41	—	—	40	—	
South Mimms	"	80	32	—	—	36	8	—	—	4	—	420
Hornsey	G. E. Dew	785	473	11	—	249	21	1	17	3	10	251
Southgate	T. E. David	419	205	1	—	145	10	11	5	9	33	171
Wood Green	R. W. Perring	471	161	3	—	209	14	—	17	19	48	223
Harrow	F. Moore	1,837	734	20	—	809	70	20	70	114	—	949
Hendon	A. E. Taylor	1,560	910	8	—	382	49	23	100	67	21	336
Edgware	Miss A. L. Coomber	1,011	421	7	—	315	28	11	115	9	105	400
Kilburn	W. H. Seabrook	903	473	5	—	249	18	18	9	66	65	258
Harlesden	J. C. James	954	415	4	—	297	46	—	79	108	5	369
Acton	G. F. K. Stidworthy	569	279	—	—	172	28	21	21	25	23	160
Ealing	B. W. La Nauze	1,111	527	6	—	468	35	8	29	22	16	508
Hayes	E. J. Burridge	902	286	—	—	508	17	10	19	20	42	373
Uxbridge	A. Finch	1,072	562	2	—	326	30	7	116	29	—	395
Hanwell	Mrs. J. Clough	564	216	6	—	248	30	20	35	9	—	255
Brentford	H. S. Baker	193	99	—	—	68	4	6	3	8	5	52
Chiswick	"	305	163	—	1	87	13	2	2	16	21	80
Isleworth	W. J. Barkwill	1,713	747	11	—	484	72	139	109	112	39	411
Staines	A. H. Bates	324	171	1	—	114	9	2	11	16	—	137
Sunbury	R. Flood	559	255	—	—	215	13	3	5	27	41	280
Twickenham	W. J. Barkwill	499	259	2	—	123	16	27	4	26	42	112
Hampton	Mrs. M. R. Baines	408	257	2	—	105	17	—	9	18	—	121
Totals		21,203	8,852	102	1	8,294	812	356	943	945	898	8,602

## ISOLATION HOSPITAL ACCOMMODATION.

(a) *Smallpox*.—The County Council is the authority for the provision of smallpox hospital accommodation for the whole of the administrative county. It has met its obligations by entering into an agreement with the London County Council whereby the very extensive accommodation provided by that authority in the River Hospitals has been made available for the reception of any smallpox cases occurring in the County of Middlesex.

(b) *Other Acute Specific Fevers*.—In the Annual Report for 1933 were set out details of the scheme which had been prepared by the County Council, in accordance with the provisions of Section 63 of the Local Government Act, 1929, for the provision of adequate isolation hospital accommodation within the County.

The scheme provided that the County should be divided into four hospital areas, each comprising from seven to nine county districts, the Council being of opinion that the comparatively large areas suggested, owing to their larger resources, would afford a greater measure of efficiency and a more fully-developed hospital service than would be the case with small areas, and would probably result in a smaller total number of beds being necessary. The suggested division into the areas proposed also contemplated something in the nature of an equalization of the financial burden necessary to provide a sufficient number of beds. The scheme provided also for reciprocal arrangements being entered into between the several joint boards or committees which would be set up. It was thought that the comparatively large areas would tend to prevent any one local authority exerting a preponderating influence in the decisions of the joint board or committee for the area, and would enable smaller or poorer districts to have access to resources available to the larger or richer districts.

The draft proposals were referred to the Councils of the districts in the County for their views and suggestions, but after lengthy negotiations it was found impossible to reconcile the views of all the districts if the principles contained in the original proposals were to be retained.

The scheme, together with particulars of the criticisms and views of the local authorities, was submitted to the Minister of Health, who is empowered by the above section to approve a scheme with or without modifications. After consideration of the objections to the County Council's Scheme, which were urged by several of the constituent county districts, an alternative draft scheme was prepared by the Ministry of Health in 1934 and submitted to the County Council for their observations. The scheme, as amended by the Ministry, contemplated the creation of nine hospital areas and was in effect a compromise between the County scheme and the desire expressed by a number of local authorities to preserve the *status quo*. In the opinion of the County Council, the Ministry's proposals constituted a serious endeavour to obtain a scheme complying with the wishes of the maximum number of local authorities, but it was considered that the result did not constitute so statesmanlike a solution of the problem as had been effected by the County Council's original scheme; and the Ministry of Health was so informed.

The decision of the Ministry of Health as to the form in which the scheme should be finally approved had not been received by the close of the year, but the County Council's proposals had, in fact, resulted in a very useful development in the south-west part of the County. Conferences were held by the representatives of the local authorities which the County Council had suggested should form one hospital district, and ultimately, with one exception, the districts decided voluntarily to join together and form a joint hospital district. In July, 1934, an Act of Parliament, entitled the Ministry of Health Provisional Order Confirmation (South Middlesex and Richmond Joint Hospital District) Act, 1934, received the Royal assent, and, as result, the existing isolation hospitals in the area, embracing the Boroughs of Heston and Isleworth and Twickenham, and the Urban Districts of Hampton, Hampton Wick and Teddington, together with the Borough of Richmond in Surrey, will be vested in the new Joint Hospital Board as from 1st April, 1935.

## TUBERCULOSIS.

The number of new cases of tuberculosis, reported during the year by medical officers of health of the constituent local sanitary authorities of the County, was 2,460, an increase of 56 over the number reported in 1933. Of these cases, 29 were those of persons who had changed their place of residence from one sanitary district to another within the County and, in accordance with the Regulations, were the subject of primary notification in each district, whilst 7 were cases which in previous years had been brought to the notice of medical officers of health by means other than notification but which were formally notified in 1934. Thus the net number of new cases in the County as a whole was 2,424. This number includes not only the new cases which arose and were diagnosed in the course of the year, but also the considerable number of persons with established disease who removed into the County during the year.

Of the gross total, 2,098 (85·28 per cent.) were notified by medical practitioners or school medical officers in accordance with the Regulations, whilst 362 (14·72 per cent.) came to the notice of medical officers of health otherwise than by formal notification.



The incidence-rates of pulmonary tuberculosis and of all forms of tuberculosis, as measured by the number of cases reported, amount to 0·98 and 1·16 per 1,000 persons living, respectively, which are the lowest rates which have ever been recorded for the County. These rates, however, for reasons set out in previous reports, cannot be accepted as an entirely accurate index of the occurrence of tuberculosis.

The number of deaths attributed to tuberculosis was 1,266 (an increase of 42 as compared with 1933) of which 1,086 were due to pulmonary and 180 to non-pulmonary tuberculosis, corresponding to a death-rate from all forms of the disease of 0·70 per 1,000 persons living.

The death-rate from pulmonary tuberculosis (0·60 per 1,000) from non-pulmonary tuberculosis (0·10 per 1,000) and from all forms of tuberculosis (0·70 per 1,000) are all identical with the corresponding rates recorded for the previous year.

In the following table are set out figures showing notifications and deaths and the corresponding rates both for pulmonary tuberculosis and for all forms of the disease during the past ten years. The diagram on page 60 illustrates the fall in mortality from tuberculosis which has taken place during the present century.

TUBERCULOSIS NOTIFICATIONS AND DEATHS FOR THE PAST 10 YEARS.

	Tuberculosis of Respiratory System.				All Forms of Tuberculosis.			
	Number of Noti- fications.	Rate per 1,000 living.	Number of Deaths.	Death-rate per 1,000 living.	Number of Noti- fications.	Rate per 1,000 living.	Number of Deaths.	Death-rate per 1,000 living.
1925	1,630	1·25	922	0·71	1,982	1·52	1,097	0·84
1926	1,655	1·25	944	0·71	2,009	1·52	1,138	0·86
1927	1,621	1·20	1,024	0·76	2,015	1·49	1,193	0·88
1928	1,478	1·04	909	0·64	1,819	1·28	1,071	0·76
1929	1,606	1·10	1,058	0·73	1,911	1·31	1,215	0·83
1930	1,623	1·04	981	0·63	2,015	1·29	1,164	0·75
1931	1,749	1·07	989	0·60	2,120	1·29	1,160	0·71
1932	1,733*	1·02	965	0·57	2,108*	1·24	1,144	0·67
1933	1,750*	1·00	1,046	0·60	2,082*	1·19	1,224	0·70
1934	1,767*	0·98	1,086	0·60	2,098*	1·16	1,266	0·70

\* These figures are obtained from the weekly notifications of the district medical officers of health in the County ; the remaining statistics (except the rates) are supplied by the Registrar-General.

The following table shows the age and sex distribution of the 2,424 new cases, which came to the notice of the County Council in 1934, divided into pulmonary and non-pulmonary groups and compared with the number of deaths, similarly classified.

NEW CASES AND DEATHS DURING 1934.

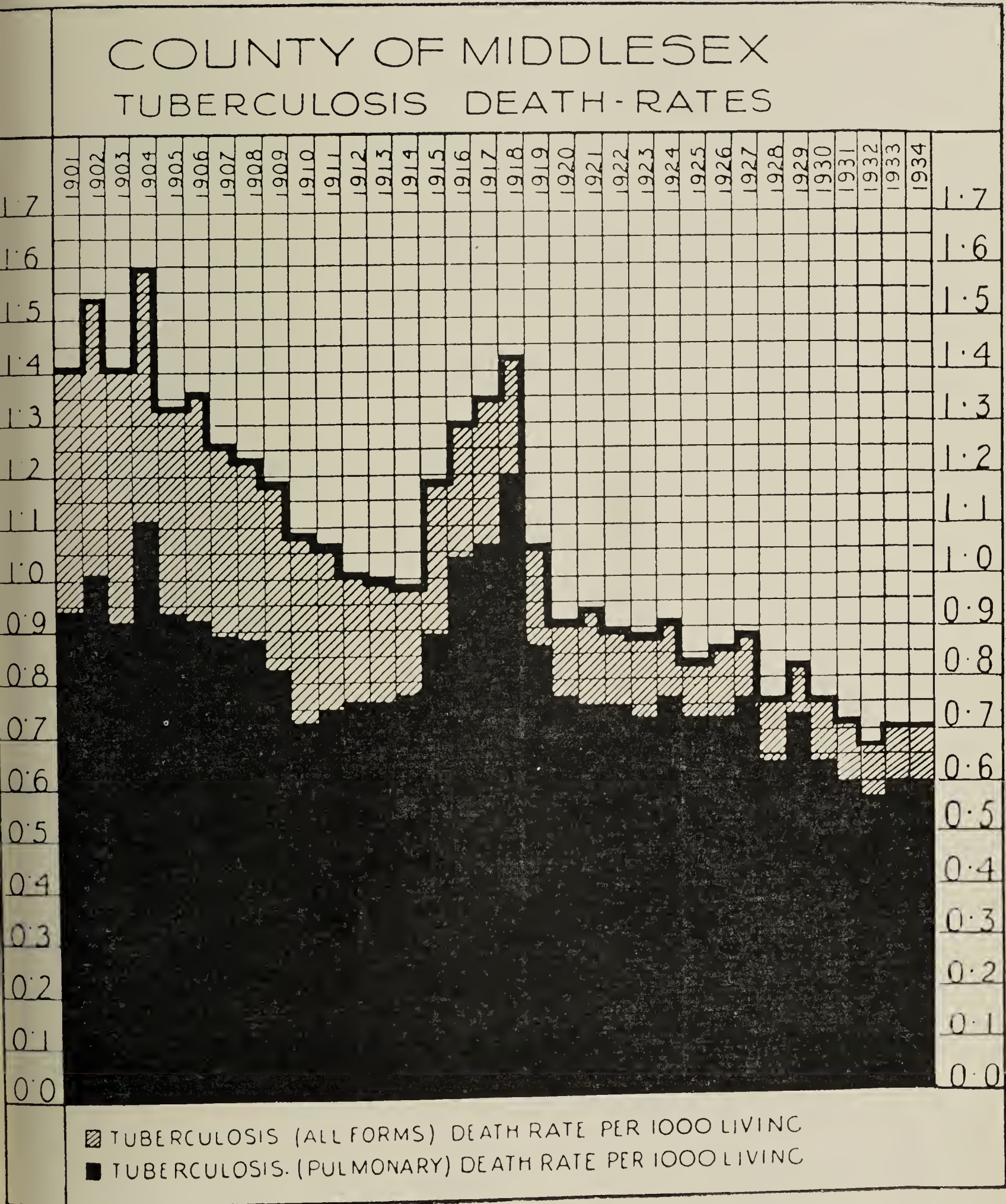
Age Periods.	New Cases.*				Deaths.†			
	Pulmonary.		Non-Pulmonary.		Pulmonary.		Non-Pulmonary.	
	M.	F.	M.	F.	M.	F.	M.	F.
0-1 .. ..	1	—	3	4	2	—	4	3
1-5 .. ..	9	7	38	25	1	3	22	16
5-10 .. ..	20	22	27	32	5	7	13	18
10-15 .. ..	28	29	35	21				
15-20 .. ..	79	117	22	24				
20-25 .. ..	161	191	18	26	97	140	19	16
25-35 .. ..	282	302	32	30				
35-45 .. ..	228	120	15	11				
45-55 .. ..	177	70	4	4	131	157	14	9
55-65 .. ..	103	34	6	8	112	80	11	5
65 and upwards	32	16	3	8	123	60	5	3
					88	22	10	4
					40	18	3	5
Totals.. ..	1,120	908	203	193	599	487	101	79

\* These figures are summarised from the weekly returns received from the medical officer of health of each district in accordance with the Public Health (Tuberculosis) Regulations, 1930, and include notified and non-notified cases in the County as a whole during the calendar year, 1934.

† Statistics supplied by the Registrar-General.

In the table on page 61 are set out details relating to notifications of, and deaths from, tuberculosis in each sanitary district in Middlesex, together with the numbers of persons whose names at the close of the year were on the tuberculosis registers kept by the various local sanitary authorities.







NOTIFICATIONS OF, DEATHS FROM, AND TOTAL NUMBER OF CASES OF TUBERCULOSIS IN EACH SANITARY DISTRICT.\*

Infectious Diseases.

Tuberculosis (all forms).			Cases of tuberculosis remaining on the 31st December, 1934, on the Registers of Notifications kept by Medical Officers of Health of districts in the County.										
Districts.	Cases notified, 1934.			Deaths, 1934.			Pulmonary.			Non-Pulmonary.			Grand Total.
	No.	Rate per 1,000 living.	No.	Rate per 1,000 living.	No.	Rate per 1,000 living.	Males.	Females.	Total.	Males.	Females.	Total.	
Acton ( <i>Borough</i> )	85	1.22	62	0.89	152	143	295	31	20	51	3.6		
Brentford and Chiswick ( <i>Borough</i> )	95	1.51	45	0.72	273	270	543	62	91	153	6.6		
Ealing ( <i>Borough</i> )	158	1.18	107	0.80	280	180	410	40	40	80	4.90		
Edmonton	147	1.61	69	0.76	266	213	479	73	68	141	6.20		
Enfield	70	0.94	60	0.80	176	146	322	40	43	83	4.5		
Feltham	24	1.15	12	0.58	19	14	33	8	11	19	5.2		
Finchley ( <i>Borough</i> )	38	0.62	34	0.55	74	80	154	13	29	42	1.96		
Friern Barnet	21	0.87	15	0.62	35	31	66	5	7	12	7.8		
Hampton	10	0.74	8	0.59	11	15	26	9	5	14	4.0		
Hampton Wick	1	0.34	1	0.34	8	6	14	1	1	2	1.6		
†Harrow-on-the-Hill	7	0.82	6	0.71	—	—	—	—	—	—	—		
Harrow	107	0.92	62	0.53	245	205	450	42	55	97	5.47		
Hayes and Harlington	28	0.94	23	0.77	43	37	80	20	18	38	1.18		
Hendon ( <i>Borough</i> )	142	1.08	78	0.60	310	268	578	106	112	218	7.96		
Heston and Isleworth ( <i>Borough</i> )	96	1.10	72	0.82	145	125	270	45	44	89	3.59		
Hornsey ( <i>Borough</i> )	114	1.20	68	0.71	286	271	557	93	89	182	7.39		
Potters Bar	13	1.52	3	0.35	18	19	37	6	7	13	5.0		
Ruislip-Northwood	13	0.61	10	0.47	47	36	83	15	8	23	1.06		
Southall-Norwood	62	1.33	30	0.64	108	101	209	29	38	67	2.76		
Southgate ( <i>Borough</i> )	57	0.95	39	0.65	112	73	185	20	19	39	2.24		
Staines	17	0.68	11	0.44	25	14	39	9	7	16	5.5		
Sunbury	9	0.62	10	0.69	12	11	23	5	4	9	3.2		
Teddington	27	1.17	21	0.91	58	46	104	24	17	41	1.45		
Tottenham ( <i>Borough</i> )	203	1.33	132	0.86	331	298	629	104	71	175	8.04		
Twickenham ( <i>Borough</i> )	49	1.13	18	0.41	84	76	160	17	23	40	2.00		
Uxbridge	39	1.10	23	0.65	56	46	102	22	19	41	1.43		
†Wealdstone	16	2.09	9	1.17	—	—	—	—	—	—	—		
Wembley	100	1.09	48	0.52	238	172	410	43	61	104	5.14		
Willesden ( <i>Borough</i> )	264	1.40	147	0.78	334	308	642	74	87	161	8.03		
Wood Green ( <i>Borough</i> )	65	1.21	35	0.65	140	100	240	33	51	84	3.24		
Yiewsley and West Drayton	21	1.42	8	0.54	39	38	77	18	20	38	1.15		
The County	2,098	1.16	1,266	0.70	3,875	3,342	7,217	1,007	1,065	2,072	9,289		

\* Statistics as to deaths supplied by the Registrar-General. Other statistics obtained from periodical returns from district medical officers of health.  
† Statistics for 1st Quarter of 1934 only. (Separate information in respect of Kingsbury Urban and Hendon Rural Districts has not been supplied by the Registrar-General (see note on page 3).)

## SCHEME FOR THE PREVENTION AND TREATMENT OF TUBERCULOSIS.

Details of the Council's scheme for the prevention and treatment of tuberculosis have been very fully described in previous reports. No radical alterations in the working of the scheme were instituted during 1934.

(a) *Tuberculosis Dispensaries.*

Information regarding the tuberculosis dispensary arrangements in Middlesex is contained in the table which follows :—

Area.	Districts served.	Tuberculosis Medical Officer.	Head Dispensary.	Branch Dispensaries.
1	Edmonton, Enfield .. ..	Dr. H. Evans ..	279, Fore Street, Edmonton.	—
1A	Tottenham .. ..	Dr. S. T. Davies ..	140, West Green Road, Tottenham.	—
2	Finchley, Friern Barnet, Hendon (except Edgware) Hornsey, Potters Bar, Southgate, Wood Green.	Dr. J. R. B. Dobson	Chester Villa, High Road, N. Finchley.	10, Alexandra Road, Hornsey ; 158, The Broadway, West Hendon.
3	Edgware, Harrow, Ruislip-Northwood, Wembley, Willesden.	Dr. O. Bruce .. ..	Pound Lane, Willesden.	53, Greenhill Crescent, Harrow.
4	Acton, Ealing, Hayes and Harlington, Southall-Norwood, Uxbridge, Yiewsley and West Drayton.	Dr. F. R. B. Atkinson (retired Oct., 1934) Dr. F. A. H. Simmonds (commenced duty Oct., 1934).	Green Man Passage, Green Man Lane, West Ealing.	*School Clinic, 45 and 47, Avenue Road, Acton ; 156, High Street, Uxbridge.
5	Brentford & Chiswick, Feltham, Hampton, Hampton Wick, Heston & Isleworth, Staines, Sunbury, Teddington, Twickenham.	Dr. W. S. Forbes ..	28, Bell Road, Hounslow.	14, Heathfield Terrace, Chiswick ; 12, Thames Street, Staines ; 1, Staines Road, Twickenham.

\* Closed December 31st, 1934.

Dr. F. R. B. Atkinson, who since the inception of the Scheme had been the Council's tuberculosis medical officer in Dispensary Area No. 4, retired in 1934. The vacancy thus created was filled by the appointment as tuberculosis officer of Dr. F. A. H. Simmonds, Deputy Medical Superintendent of the County Sanatorium, Harefield.

During recent years attendances at the branch dispensary at Acton had shown a considerable falling off. As the premises were not entirely suitable for the purpose of a tuberculosis dispensary and in view of the present ease of communication by public vehicles between Acton and the head dispensary of the area at Ealing, the County Council decided to cease to use the Acton branch dispensary. The approval of the Ministry of Health was obtained to this course and on 31st December, 1934, the premises were closed for dispensary purposes.

The work carried out at the Council's tuberculosis dispensaries is mainly consultative and advisory in character, and active treatment is not undertaken to any considerable extent. Provision has been made by the County Council, however, whereby certain specialized forms of out-patient treatment are given to tuberculous patients at voluntary hospitals or elsewhere, the County Council bearing the cost, subject in a few instances to a contribution from the patient or his relatives. Some particulars of this work may be summarized as follows :—

- (1) *Artificial Pneumothorax refills.*—During the year 240 patients made a total number of 2,949 attendances for the purpose of continuing artificial pneumothorax refills : of this number, 110 were dealt with at the County Sanatorium, Harefield, where they made in all 1,257 attendances.
- (2) *Sanocrysin.*—Four patients attended a voluntary hospital in London, at the cost of the County Council, for sanocrysin injections. They made a total of 51 attendances.



- (3) *Light Treatment*.—Thirty-two patients, most of them suffering from lupus, received treatment by Finsen or other forms of light at certain voluntary hospitals in London, making a total of 2,162 attendances.
- (4) *After-care of Surgical Cases*.—Children discharged from Heatherwood Hospital, Ascot, are kept under supervision by an orthopædic surgeon from the Hospital at the London County Hall, Westminster, where minor manipulative treatment is given and surgical appliances are adjusted or renewed. During the year, 45 patients were supervised in this way and made 129 attendances.

(b) *Institutional Accommodation.*

At the Council's own sanatoria at Harefield and South Mimms, there are some 500 beds for the treatment of pulmonary tuberculosis. Pulmonary cases in excess of this number and persons suffering from non-pulmonary forms of the disease are maintained by the County Council in sanatoria and hospitals situated in various parts of the country and belonging to other local authorities or voluntary organizations.

In previous annual reports reference has been made to the demands upon institutional accommodation, especially since the financial crisis of 1931. During 1934, although pressure remained very heavy, the position was slightly easier than in the preceding year. Throughout 1934, between 900 and 975 tuberculous persons were being maintained by the Council in hospitals and sanatoria. In addition a substantial number received treatment in the Council's general hospitals as public assistance patients.

The following statement shows the total number of beds belonging to, or reserved for the sole use of, the Council during 1934 :—

Institution.	Accommodation.			Type of case.
	Adults.		Children.	
	M.	F.		
County Sanatorium, Harefield	129	129	56	Pulmonary—sanatorium.
County Sanatorium, Clare Hall, South Mimms	120	66	—	Pulmonary—observation. Pulmonary—late sanatorium and hospital.
Heatherwood Hospital, Ascot ..	—	—	25	Non-pulmonary.
Victoria Home, Margate .. ..	—	—	6	Non-pulmonary.

For a number of years past the County Council had reserved 25 beds at Heatherwood Hospital, Ascot, for the treatment of cases of non-pulmonary tuberculosis in children. This excellently equipped hospital, which was established by, and belonged to, the United Services Fund, was acquired in 1934 by the London County Council. Arrangements were made with the London County Council whereby the Middlesex County Council should continue to have the use of 25 beds at Heatherwood for a period of two years from October 1st, 1934, the date on which the London County Council took over the hospital. The convalescent home, Melton Lodge, Great Yarmouth, which formerly served for the after-treatment of children discharged from Heatherwood, and was a very valuable institution, is no longer available for that purpose, having been acquired by another local authority.

*Other Institutions at which Patients have been maintained during 1934.*

- Sanatoria*.—Brompton Hospital Sanatorium, Frimley ; Cotswold, Gloucester ; Daneswood, Woburn Sands ; Eversfield, St. Leonards ; Fairlight, Hastings ; Grosvenor, Ashford, Kent ; Holy Cross, Haslemere ; Kelling, Holt, Norfolk ; King Edward VII, Midhurst ; King George V, Godalming (L.C.C.) ; Maltings Farm, Nayland, nr. Colchester ; Marillac, Warley, Essex ; Merivale, Sandon, nr. Chelmsford ; National, Benenden ; Old Manor House, Broadstairs ; Prior Place, Camberley, Surrey ; Royal National, Bournemouth ; Royal National, Ventnor ; Tehidy (Cornwall C.C.).
- Hospitals*.—St. Anthony's, Cheam ; St. Barnabas', Torquay ; Colindale, Hendon (L.C.C.) ; Creaton, Northampton ; Ponsarn, Merthyr Tydfil ; Prince of Wales's, Tottenham ; All Saints', Southwark ; City of London, Victoria Park ; National Temperance, Royal Northern, Holloway ; Brompton ; Royal Chest ; St. Mary's ; St. Thomas's ; University College Hospital ; and the London County Council's general hospitals, Archway ; Hackney ; Mile End ; New End ; Paddington ; St. Charles ; St. Mary Abbots.
- Colonies*.—British Legion Village, Preston Hall, Aylesford ; Burrow Hill, Frimley ; Papworth Village Settlement, Papworth Hall, Cambridge.
- Homes for very advanced cases*.—St. Joseph's Hospice, Hackney ;

Pulmonary—  
various types.

Hospitals.—Atkinson Morley, Wimbledon ; Hendon Cottage ; Holy Cross, Broadstairs ; Royal National Orthopædic, London, and Country Branch, Stanmore ; Royal Sea-Bathing, Margate ; St. Anthony's, Cleam ; St. Nicholas-at-Wade ; St. Vincent's Orthopædic, Pinner ; Tait Home, Broadstairs ; Wingfield Orthopædic, Oxford ; and Prince of Wales's, Tottenham ; The London, St. Mary's, St. Peters for Stone, St. Thomas's, and University College Hospitals, London.

Alfred Yarrow Home, Broadstairs ; Heritage Craft Schools, Chailey ; Holy Cross, Broadstairs ; Holy Cross, Ramsgate ; Lord Mayor Treloar Cripples', Alton ; Melton Lodge, Gt. Yarmouth ; Royal, Richmond ; Royal National Orthopædic, Country Branch, Stanmore ; Royal Sea-Bathing, Margate ; St. Michael's Orthopædic, Clacton ; St. Nicholas and St. Martin's Orthopædic, Pyrford ; St. Vincent's, Pinner ; Wingfield Orthopædic, Oxford ; Hendon Cottage ; Prince of Wales's, Tottenham ; Cheyne, Chelsea, University College Hospital, London.

Non-pulmonary—adults.

Non-pulmonary—children.

THE COUNTY SANATORIUM, HAREFIELD.

In last year's Annual Report appeared a brief description of the new sanatorium with which the County Council proposed to replace the existing sanatorium at Harefield. Towards the end of the year tenders for the erection of the new buildings were received and accepted by the County Council and the actual work of construction was commenced early in 1935.

The following summary of the year's work at the County Sanatorium, Harefield has been prepared by Dr. J. R. McGregor, Medical Superintendent :—

Admissions, Discharges and Deaths.

				In Sanatorium on 31.12.33	Admitted During Year	Discharged During Year	Deaths	Remaining in Sanatorium on 31.12.34
<i>Treatment.</i>								
Adults								
Male	..	..	..	127	330	292	39	126
Female	..	..	..	120	301	258	39	124
Children								
Male	..	..	..	17	35	34	2	16
Female	..	..	..	18	38	28	3	25
				282	704	612	83	291
<i>Observation.</i>								
Adults								
Male	..	..	..	—	27	27	—	—
Female	..	..	..	2	23	25	—	—
Children—								
Male	..	..	..	3	46	48	—	1
Female	..	..	..	—	31	28	—	3
Totals .. ..				287	831	740	83	295





*Observation Ward (Children).*—Of the 77 children admitted for observation during the year, 27 (16 males and 11 females) were found to have definite evidence of pulmonary tuberculosis and were admitted direct to the treatment wards.

The following shows the results of the examination of 80 children, primarily admitted for observation, who were discharged during the year :—

Tuberculous .. .. .	30
No evidence of disease .. .. .	49
Doubtful (removed by parents before a diagnosis was made) ..	1

The diagnosis was made by clinical, pathological, and X-ray examinations.

*X-Ray Department.*—During 1934 approximately 1,400 X-ray photographs were taken, and in addition numerous screen examinations were made.

*Out-Patients.*—During the year 110 out-patients attended periodically for the purpose of having artificial pneumothorax refills, making a total of 1,257 attendances. Out-patients generally attend in the morning and are discharged the same day, except in a few cases where it is considered advisable for them to rest in the institution over night and return home the next day. In several cases, patients' refills are done on Sunday, as the patients are working and it is not convenient for them to attend on a week-day.

Of the total number of out-patients attending, 10 were detained for further periods of institutional treatment; these are included in the table of admissions for the year. Of these patients detained, artificial pneumothorax treatment was discontinued in two cases as it was found that the patients were not deriving benefit from it. In one other case, detained because of unsatisfactory progress, the patient developed a spontaneous pneumothorax in the opposite lung to the artificial pneumothorax, and died.

In five other cases the treatment was discontinued as the patients were not gaining benefit from it. One of these has since died.

In nine cases the treatment was completed and in each case the patient is keeping in good health. Four of these patients (females) have since married.

Three cases were admitted to hospital for further surgical procedure, in one of whom the pneumothorax became obliterated and phrenic evulsion has since been performed.

In four cases the artificial pneumothorax was abandoned owing to the presence of fluid.

In four cases patients were transferred for their refills to other institutions, through finding it inconvenient to make the journey to Harefield for business or domestic reasons.

The number of out-patients still attending for refills at the end of the year was 77.

Other methods of collapse therapy employed were thoracoplasty, cauterisation of adhesions, and phrenic evulsion, the patients being transferred to chest hospitals for these forms of treatment.

Treatment by sanocrysin has again been given in a number of selected cases with satisfactory results generally.

#### *Farm and Garden.*

The following statement shows the value of the produce supplied from the farm and garden during the year ended 31st December, 1934.

	Supplied to Sanatorium.			Sold.			Total.		
	£	s.	d.	£	s.	d.	£	s.	d.
Garden Produce—									
Vegetables .. .. .	598	18	9	—			598	18	9
Fruit .. .. .	97	6	6	—			97	6	6
Plants and flowers .. .. .	243	5	4	—			243	5	4
Potatoes .. .. .	165	17	9	—			165	17	9
Total value of garden produce .. .. .	£1,105	8	4	—			£1,105	8	4
Produce from Poultry Farm—									
Eggs .. .. .	472	0	0	293	6	6	765	6	6
Fowls .. .. .	352	8	9	1	5	0	353	13	9
Ducks and geese .. .. .	19	0	7	9	15	0	28	15	7
Manure .. .. .	31	10	0	—			31	10	0
Feathers .. .. .	22	8	0	—			22	8	0
Bags .. .. .	—			0	8	0	0	8	0
Total value of produce from poultry farm ..	£897	7	4	£304	14	6	£1,202	1	10



	Supplied to Sanatorium.			Sold.			Total.		
	£	s.	d.	£	s.	d.	£	s.	d.
Produce from piggeries—									
Pigs .. .. .	426	3	5	66	8	0	492	11	5
Manure .. .. .	15	6	0	—			15	6	0
Total value of produce from pigs .. .. .	£441	9	5	£66	8	0	£507	17	5
Hay .. .. .	£20	11	0	—			£20	11	0

Total value of produce from garden, poultry farm and piggeries :—

	£	s.	d.
Supplied to sanatorium .. .. .	2,464	16	1
Sold .. .. .	371	2	6
Total .. .. .	£2,835	18	7

*Nurses' Training School.*—The Sanatorium is approved by the General Nursing Council as a training school for the State Preliminary Examination. During 1934, 4 probationer nurses passed this examination and 2 of these were transferred to the Council's general hospitals for general training, whilst 3 were successful in obtaining the certificate of the Tuberculosis Nurses Association.

*Dental Treatment.*—The Sanatorium is visited weekly by Mr. S. J. Smith, L.D.S., the Council's Senior Dental Officer, who sees any patients who may be referred to him by the medical staff and undertakes any necessary dental treatment. The following table indicates the extent of this work at Harefield Sanatorium during 1934 :—

Number of patients inspected.	Number of attendances made by patients.	Number actually treated.	Extractions.		Fillings.	Other treatment.	Number of dentures completed.
			Under local anæsthetic.	Under gas.			
351	577	239	620	13	114	380	17

THE COUNTY SANATORIUM, CLARE HALL.

Under the terms of the superannuation scheme, the extended period of service of Dr. A. C. Tabois, Medical Superintendent of the County Sanatorium, Clare Hall, terminated in February, 1935.

Dr. Tabois had been superintendent since the institution was first used for the reception of tuberculous persons, when it belonged to the Middlesex Districts Joint Smallpox Hospital Board, and his energy, loyalty and devotion combined to render him a most valued and trusted officer of the Council. The patients also will regret his departure, as his cheerfulness and sympathy have caused him to be looked upon as a personal friend of each.

The following summary of the work of the sanatorium during 1934 has been prepared by Dr. J. T. Nicol Roe, the Deputy Medical Superintendent, who acted as Medical Superintendent pending the appointment of a successor to Dr. Tabois.

Table showing the movement of patients during the year ended 31st December, 1934 :—

	In Sanatorium on 31.12.33.	Admitted during Year.	Discharged during Year.	Deaths.	In Sanatorium on 31.12.34.
Male—					
Hospital .. .. .	52	82	48	33	53
Sanatorium .. .. .	65	151	110	41	65
Female—					
Hospital .. .. .	26	42	21	28	20
Sanatorium .. .. .	40	72	45	22	44
	183	347	224	124	182

There were, therefore, 530 cases under treatment during the year.

*Type of Case Admitted.*—Although the proportion of hospital cases to total admissions was 35·74 per cent., the actual percentage of bed cases (according to Ministry of Health formula) was

68·66 per cent., while a general classification of admissions into early, intermediate and advanced cases was as follows :—

Early, 0·28 per cent. ; Intermediate, 1·45 per cent. ; Advanced, 98·27 per cent.

The following figures show the rise in the proportion of bed cases :—

									Per cent.
1928	..	..	..	..	..	..	..	..	54·31
1929	..	..	..	..	..	..	..	..	55·25
1930	..	..	..	..	..	..	..	..	61·41
1931	..	..	..	..	..	..	..	..	62·28
1932	..	..	..	..	..	..	..	..	61·74
1933	..	..	..	..	..	..	..	..	68·71
1934	..	..	..	..	..	..	..	..	68·66

*Length of Stay.*—The average length of stay of patients who were discharged or died was 181·67 days. This shows a slight diminution as compared with the previous two years :—

1919	..	..	..	..	..	..	..	..	109·46
1924	..	..	..	..	..	..	..	..	152·41
1929	..	..	..	..	..	..	..	..	169·93
1932	..	..	..	..	..	..	..	..	227·50
1933	..	..	..	..	..	..	..	..	202·45

*Condition on Discharge.*—The following table shows the condition of patients on discharge during the last three years and, for comparison, those in the years 1917, 1922 and 1927 :—

Year.	Discharges.	Condition on Discharge.*				
		Very much Improved.	Much Improved.	Slightly Improved.	In Statu Quo.	Worse.
1917 .. ..	386	173	56	32	19	18
1922 .. ..	307	62	71	88	31	35
1927 .. ..	262	21	105	71	17	16
1932 .. ..	224	6	62	87	29	21
1933 .. ..	224	1	36	123	29	18
1934 .. ..	224	3	36	118	26	19

\* Excluding patients who went out at their own request or were dismissed.

*Mortality.*—This was 35·73 per cent. as compared with 2·05 per cent. in 1924. The proportion of cases of advanced disease admitted to Clare Hall has been very high indeed during the last few years and the above figures are a corollary of this fact.

*Treatment.*—During the year, solganol b oleosum has been used in a number of cases instead of sanocrysin. It has been found to be easier of injection (intramuscular) and appears to have less toxicity. There has been a definite lack of reaction to the injection and a definite diminution in the serious complications which sometimes appear in gold therapy. But the efficacy of the drug in the treatment of tuberculosis seems to be as uncertain as we found when we tried sanocrysin.

Collosal antimony, the value of which seemed to be only the producing of a temporary initial tonic effect, has been almost discontinued.

The recently initiated nordalin treatment is being tried out at this sanatorium. In a way this is a form of tuberculin administration. Four advanced cases, two with a hopeless prognosis and two with a hopeful prognosis, have commenced the course.

*Pathology.*—The only point of note in this branch has been the increased number of post-mortem examinations being done. This has been partly due to an investigation relating to intestinal tuberculosis.

A chemical test on the fæces—Triboulet’s test—has been applied in an endeavour to determine the presence of ulceration of the bowel. The results are correlated with the clinical diagnosis of intestinal tuberculosis, and also with the post-mortem findings. Up to the end of 1934 the findings had not correlated satisfactorily. This investigation continues. Its value is significant in a way. If early intestinal tuberculosis were to be diagnosed sufficiently early, then, as in the tuberculous involvement of other tissues, there would be some hope of improvement.

*Nurses’ Training School.*—The Sister-Tutor, after a course there, gained the Brompton Hospital Tuberculosis Certificate with honours, taking first place.

During the year seven nurses passed the Part I examination for the Tuberculosis Certificate, while two received the certificate, one with honours.

Two nurses passed the State Preliminary Examination and have been transferred to County general hospitals for the completion of their training.



*Dental Treatment.*—As in the case of Harefield, the sanatorium is visited each week by the Council’s Senior Dental Officer, Mr. S. J. Smith, L.D.S., who carries out any necessary dental work at a well-equipped clinic on the premises.

The following table summarizes the dental work undertaken at Clare Hall during 1934 :—

Number of patients inspected.	Number of attendances made by patients.	Number treated.	Extractions.		Fillings.	Other treatment.	Number of dentures completed.
			Under local anæsthetic.	Under gas.			
205	379	146	404	25	9	335	9

STATISTICAL SURVEY OF THE WORK CARRIED OUT DURING 1934 UNDER THE COUNTY TUBERCULOSIS SCHEME.

The tables appearing on the pages which follow are those prescribed by the Ministry of Health for the purpose of the annual statistical returns of the authority. These returns present in numerical form a very complete picture of the scope and amount of work carried out in connection with the County Council’s scheme for the prevention and treatment of tuberculosis.

Tables A and B refer to the work of the dispensaries ; tables C, D and E relate to the amount of accommodation available and the extent of treatment afforded ; table F gives information as to the results of observation of doubtful cases, and table G the immediate results of treatment of definitely tuberculous persons. Table H aims at exhibiting statistically the after-history and ultimate fate of all tuberculous persons who have come under public medical treatment.

In order to appreciate the information contained in these tables, it is necessary to have in mind the precise meaning of the terms occurring therein, many of which are used in a special sense. Information on this matter is given below.

DEFINITIONS AND CLASSIFICATION.—Patients diagnosed as suffering from pulmonary tuberculosis are placed in the following categories :—

*Class T.B. minus*, viz., cases in which tubercle bacilli have never been demonstrated in the sputum ; and

*Class T.B. plus*, viz., cases in which tubercle bacilli have at any time been found. It should be noted that a patient originally in *Class T.B. minus* must be transferred to *Class T.B. plus* at any stage in the course of treatment if and when tubercle bacilli are found ; while, on the other hand, a patient who is once placed in *Class T.B. plus* can never revert to *Class T.B. minus*. *Class T.B. plus* is further subdivided into three groups as follows :—

Group I.—Cases with slight constitutional disturbance, if any, e.g., there should not be marked acceleration of pulse nor elevation of temperature except of very transient duration ; gastro-intestinal disturbance or emaciation, if present, should not be excessive.

The obvious physical signs should be of very limited extent as follows :—Either present in one lobe only and, in the case of an apical lesion of one upper lobe, not extending below the second rib in front, or not exceeding an equivalent area in any one lobe ; or where these physical signs are present in more than one lobe, they should be limited to the apices of the upper lobes and should not extend below the clavicle and the spine of the scapula.

No complication (tuberculous or other) of prognostic gravity should be present. A small area of dry pleurisy does not exclude a case from this group.

Group III.—Cases with profound systemic disturbance or constitutional deterioration, with marked impairment of function, either local or general, and with little or no prospect of recovery.

All cases with grave complications, whether tuberculous or not, are classified in this group, e.g., diabetes, tuberculosis of larynx or intestine, &c.

Group II.—All cases which cannot be placed in Groups I and III.

Patients suffering from non-pulmonary tuberculosis are classified according to the site of the lesion as follows :—

- (1) Tuberculosis of bones and joints.
- (2) Abdominal tuberculosis (i.e., tuberculosis of peritoncum, intestines or mesenteric glands).
- (3) Tuberculosis of other organs.
- (4) Tuberculosis of peripheral glands.

Patients suffering from multiple lesions are classified in one sub-group only, viz., in that applicable to the case which stands highest in the table.

*Observation Cases.*—Persons attending at, or in connection with, the dispensaries, in whose cases the tuberculosis officer cannot, within a period of one month from his first examination of the case, come to a definite diagnosis after physical examination and the application of the necessary tests. (These cases appear on Table A, under sections A (b) and B (b).)

*Quiescent.*—Cases which have no symptoms of tuberculosis and no signs of tuberculous disease except such as are compatible with a completely healed lesion, and in which sputum, if present, is free from tubercle bacilli.

*Arrested.*—In pulmonary cases the term “arrested” is applied only to cases which have been “quiescent” for a period of at least two years.

In non-pulmonary cases the term “arrested” is used as soon as there is reason to believe that the disease is unlikely to recur.

*Recovered.*—No patient is deemed to be “recovered” until in the case of pulmonary tuberculosis, five years, and, in the case of non-pulmonary tuberculosis, three years, have elapsed without any symptoms of active disease (i.e., arrest has been maintained for three years).

TABLE A.

Return showing the work of the Dispensaries during the Year 1934.

Diagnosis.	Pulmonary.				Non-Pulmonary.				Total.				Grand Total.
	Adults.		Children.		Adults.		Children.		Adults.		Children.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
A.— <i>New Cases</i> examined during the year (excluding contacts):—													
(a) Definitely tuberculous ...	670	526	24	33	41	64	48	25	711	590	72	58	1,431
*(b) Diagnosis not completed ...	—	—	—	—	—	—	—	—	6	9	4	2	21
(c) Non-tuberculous ...	—	—	—	—	—	—	—	—	518	590	211	207	1,526
B.— <i>Contacts</i> examined during the year:—													
(a) Definitely tuberculous ...	28	38	3	7	1	1	5	3	29	39	8	10	86
*(b) Diagnosis not completed ...	—	—	—	—	—	—	—	—	—	1	1	5	7
(c) Non-tuberculous ...	—	—	—	—	—	—	—	—	124	265	314	268	971
C.— <i>Cases</i> written off the Dispensary Registers as:—													
(a) Recovered ...	85	88	25	20	14	22	38	32	99	110	63	52	324
(b) Non-tuberculous (including any such cases previously diagnosed and entered on the Dispensary Registers as tuberculous)	—	—	—	—	—	—	—	—	645	863	528	472	2,508
D.— <i>Number of Cases</i> on Dispensary Registers on 31st December:—													
(a) Definitely tuberculous ...	2,110	1,604	122	118	188	210	244	192	2,298	1,814	366	310	4,788
(b) Diagnosis not completed ...	—	—	—	—	—	—	—	—	6	10	5	7	28
1. Number of cases on Dispensary Registers on 1st January ...				4,719	2. Number of cases transferred from other areas and cases returned after discharge under Head 3 in previous years ...				319				
3. Number of cases transferred to other areas, cases not desiring further assistance under the scheme, and cases "lost sight of" ...				667	4. Cases written off during the year as Dead (all causes) ...				765				
5. Number of attendances at the Dispensaries (including Contacts) ...				14,143	6. Number of Insured Persons under Domiciliary Treatment on 31st December ...				81				
7. Number of consultations with medical practitioners:— (a) Personal ... (b) Other ...				667 4,432	8. Number of visits by Tuberculosis Officers to homes (including personal consultations) ...				1,023				
9. Number of visits by Nurses or Health Visitors to homes for Dispensary purposes ...				15,674	10. Number of:— (a) Specimens of sputum, etc., examined (b) X-ray examinations made in connection with Dispensary work ...				1,914 871				
11. Number of "Recovered" cases restored to Dispensary Registers and included in A (a) and A (b) above ...				8	12. Number of "T.B. plus" cases on Dispensary Registers on 31st December ...				2,731				

TABLE B.

Number of Dispensaries for the treatment of Tuberculosis (excluding centres used only for special forms of treatment).

Provided by the Council ...	14
Provided by Voluntary Bodies ...	Nil

\* i.e., remaining undiagnosed on 31st December.



TABLE C.\*  
Number of Beds available for the treatment of Tuberculosis on 31st December in Institutions belonging to the Council.

Name of Institution.	For Pulmonary Cases.		For Non-Pulmonary Cases.		Total.
	Adults.	Children under 15.	Adults.	Children under 15.	
County Sanatorium, Harefield .. ..	262	64	—	—	326
County Sanatorium, Clare Hall .. ..	186	—	—	—	186
<i>Poor Law Institutions.</i>					
North Middlesex County Hospital ..	28	2	4	1	35†
Central Middlesex County Hospital ..	13	—	—	2	15
Redhill County Hospital .. .. .	2	—	—	1	3
Redhill Institution .. .. .	4	—	1	—	5
Hillingdon County Hospital .. ..	8	—	—	1	9
Hillingdon Institution .. .. .	1	—	—	—	1
West Middlesex County Hospital ..	26	—	1	6	33

\* All institutions belonging to the Authority which are being used for the treatment of tubereulosis are included. Any of them which have not been appropriated for Public Health purposes and are being administered by the Public Assistance Committee are shown separately under the title of "Poor Law Institutions."

"Number of beds available," means the total number of beds in the Institution used for the purpose, whether they are all oecupied or not, and whether they are oecupied by patients from the area of the Authority, or are leased to or used by other Authorities.

† 20 baleony beds (in addition to above) available in good weather only.

TABLE D—(a).  
Return showing the extent of Residential Treatment and Observation during the year in Institutions (other than Poor Law Institutions) approved for the treatment of Tuberculosis.

	In Institu- tions on Jan. 1st. (1)	Admitted during the year. (2)	Discharged during the year. (3)	Died in the Insti- tutions. (4)	In Institu- tions on Dec. 31st. (5)
Number of doubtfully tuberculous cases admitted for observation—					
Adults—					
Males .. .. .	—	28	28	—	—
Females .. .. .	2	25	26	—	1
Children .. .. .	2	81	79	—	4
Total .. .. .	4	134	133	—	5
Number of patients suffering from pulmonary tuberculosis—					
Adults—					
Males .. .. .	377	721	626	123	349
Females .. .. .	276	568	471	96	277
Children .. .. .	33	55	50	3	35
Total .. .. .	686	1,344	1,147	222	661
Number of patients suffering from non- pulmonary tuberculosis—					
Adults—					
Males .. .. .	66	60	57	10	59
Females .. .. .	62	49	51	4	56
Children .. .. .	138	86	101	5	118
Total .. .. .	266	195	209	19	233
GRAND TOTAL .. ..	956	1,673	1,489	241	899

TABLE D—(b).

Return showing the number of patients admitted for one to four nights for artificial pneumothorax refills.

					Number of individual patients treated during the year 1934.	Number of admissions during the year.	Number of discharges during the year.
Adults—							
Males .. .. .					1	1	1
Females .. .. .					2	2	2
Children—Females .. .. .					2	11	11
Total .. .. .					5	14	14

TABLE E.

Return showing the extent of Residential Treatment provided during the year in Poor Law Institutions for persons chargeable to the Council.

Patients suffering from tuberculosis admitted for treatment.					In Institutions on Jan. 1st. (1)	Admitted during the year. (2)	Discharged during the year. (3)	Died in the Institutions. (4)	In Institutions on Dec. 31st. (5)
(a) Pulmonary.									
Adults—									
Males .. .. .					29	404	256	126	51
Females .. .. .					43	313	218	103	35
Children .. .. .					2	25	19	6	2
Total .. .. .					74	742	493	235	88
(b) Non-pulmonary.									
Adults—									
Males .. .. .					3	63	41	21	4
Females .. .. .					3	48	40	8	3
Children .. .. .					6	76	39	32	11
Total .. .. .					12	187	120	61	18
GRAND TOTAL .. .. .					86	929	613	296	106

TABLE F.

Return showing the results of observation of doubtfully tuberculous cases discharged during the year from Institutions approved for the treatment of Tuberculosis.

Diagnosis on discharge from observation.	For Pulmonary Tuberculosis.						For Non-Pulmonary Tuberculosis.						TOTALS.		
	Stay under 4 weeks.			Stay over 4 weeks.			Stay under 4 weeks.			Stay over 4 weeks.					
	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.
Tuberculous .. ..	6	10	19	1	—	5	—	—	—	—	—	—	7	10	24
Non-tuberculous.. ..	18	15	38	2	—	13	—	—	1	—	1	3	20	16	55
Doubtful .. ..	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—
TOTALS .. ..	25	25	57	3	—	18	—	—	1	—	1	3	28	26	79



TABLE G.

Return showing the immediate results of treatment of definitely tuberculous patients discharged during the year from Institutions approved for the treatment of Tuberculosis.

Classification on admission to the Institution.	Condition at time of Discharge.	Duration of Residential Treatment in the Institution.												GRAND TOTALS.					
		Under 3 months.			3-6 months.			6-12 months.			More than 12 months.				Totals.				
		M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.		M.	F.	Ch.		
PULMONARY TUBERCULOSIS.	Class T.B. minus .. ..	Quiescent .. ..	18	17	3	36	30	10	10	15	14	2	—	3	66	62	30	158	
		Not quiescent .. ..	19	21	2	17	16	3	6	6	7	2	2	—	1	44	43	13	100
		Died in Institution *	1	—	—	2	2	—	—	—	—	—	1	—	—	4	2	—	6
	Class T.B. plus, Group I ..	Quiescent .. ..	19	5	—	45	16	—	—	13	12	2	2	1	—	79	34	2	115
		Not quiescent .. ..	29	31	1	59	40	1	38	28	—	8	5	—	—	134	104	2	240
		Died in Institution	5	4	—	7	2	—	5	4	1	6	1	—	—	23	11	1	35
	Class T.B. plus, Group II	Quiescent .. ..	8	4	—	14	9	—	9	6	—	4	2	—	—	35	21	—	56
		Not quiescent .. ..	58	27	1	75	61	1	52	35	—	17	12	—	—	202	135	2	339
		Died in Institution	24	13	1	9	11	—	9	14	—	8	7	—	—	50	45	1	96
	Class T.B. plus, Group III	Quiescent .. ..	—	—	—	4	1	—	—	—	1	—	—	1	—	4	3	—	7
Not quiescent .. ..		8	10	—	13	14	—	10	12	—	8	6	—	—	39	42	—	81	
Died in Institution		10	12	1	11	6	—	2	7	—	5	2	—	—	28	27	1	56	
NON-PULMONARY TUBERCULOSIS.	Bones and Joints .. ..	Quiescent .. ..	1	1	1	3	1	4	4	2	9	9	9	23	14	13	37	64	
		Not quiescent .. ..	4	4	4	2	4	—	2	1	2	2	3	2	11	11	17	39	
		Died in Institution	4	—	—	1	—	2	—	—	2	1	3	—	2	8	2	5	15
	Abdominal .. ..	Quiescent .. ..	1	—	1	2	—	—	—	3	3	6	—	—	4	6	3	11	20
		Not quiescent .. ..	1	4	—	1	3	1	1	1	3	2	1	—	—	4	10	3	17
		Died in Institution	—	—	—	—	2	—	—	1	—	—	1	—	—	2	2	—	4
	Other Organs .. ..	Quiescent .. ..	1	—	—	1	1	3	2	2	1	2	2	—	—	6	2	5	13
		Not quiescent .. ..	1	4	—	1	1	—	—	—	—	2	2	1	—	4	6	—	10
		Died in Institution	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Peripheral glands .. ..	Quiescent .. ..	—	—	—	1	1	9	1	1	1	6	4	2	7	6	4	22	32
Not quiescent .. ..		—	—	—	—	—	3	1	—	—	2	—	—	—	1	—	5	6	
Died in Institution		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

\* Class T.B. Minus. Died in Institution.—Particulars of the six cases coming within this category are as follows :—

Sputum negative on one occasion—		No sputum available—	
Cause of death : Pulmonary tuberculosis		Cause of death—	
Sputum negative on more than one occasion—		Hæmoptysis	
Cause of death—		Pulmonary tuberculosis, cardiac failure	
? Carcinoma of lungs	...	...	...
Pulmonary tuberculosis, tb. enteritis and peritonitis	...	...	...
Tb. mastoid and pulmonary fibrosis	...	...	...
		Total	
		1	
		1	
		—	
		6	









TABLE H (b).—NON-PULMONARY TUBERCULOSIS.

Annual Return showing in summary form (a) the condition at the end of 1934 of all patients remaining on the Dispensary Registers ; and (b) the reasons for the removal of all cases written off the Registers.

Condition at the time of the last record made during the year to which the return relates.	Previous to 1926.					1926.					1927.					1928.					1929.					1930.					1931.					1932.					1933.					1934.							
	Bones and Joints.	Abdominal.	Other Organs.	Peripheral Glands.	Total.	Bones and Joints.	Abdominal.	Other Organs.	Peripheral Glands.	Total.	Bones and Joints.	Abdominal.	Other Organs.	Peripheral Glands.	Total.	Bones and Joints.	Abdominal.	Other Organs.	Peripheral Glands.	Total.	Bones and Joints.	Abdominal.	Other Organs.	Peripheral Glands.	Total.	Bones and Joints.	Abdominal.	Other Organs.	Peripheral Glands.	Total.	Bones and Joints.	Abdominal.	Other Organs.	Peripheral Glands.	Total.	Bones and Joints.	Abdominal.	Other Organs.	Peripheral Glands.	Total.													
(a) Remaining on Dispensary Registers on 31st Dec.																																																					
Disease Arrested—																																																					
Adults—																																																					
Males ... ..	3	—	—	1	4	1	—	1	—	2	1	—	—	—	1	1	1	1	—	3	2	—	2	1	5	10	1	1	—	12	7	2	1	3	13	4	1	3	2	10	2	2	—	2	6	2	1	—	1	4			
Females ... ..	1	—	2	—	3	—	—	1	—	1	2	—	1	—	3	1	2	1	—	4	1	—	1	3	5	3	1	1	1	6	4	2	3	4	13	3	6	3	7	19	—	1	—	1	2	—	—	1	1				
Children ... ..	17	—	2	2	21	7	—	—	3	10	10	3	—	4	17	8	1	—	4	13	15	2	1	3	21	16	6	2	12	36	14	8	6	17	45	8	8	—	16	32	1	3	1	10	15	1	2	—	3	6			
Disease not Arrested—																																																					
Adults—																																																					
Males ... ..	5	—	2	—	7	—	—	1	—	1	1	—	1	—	2	3	—	—	—	3	3	—	2	—	5	6	1	2	—	9	7	—	4	—	11	8	3	6	1	18	17	2	8	5	32	13	7	5	1	26			
Females ... ..	3	—	3	—	6	2	—	—	—	2	2	2	—	—	4	2	—	2	—	4	—	—	1	—	1	2	1	4	—	7	9	4	1	—	14	16	1	8	3	28	10	8	3	1	22	24	12	12	9	57			
Children ... ..	11	—	1	—	12	3	1	—	1	5	8	—	—	2	10	8	—	—	—	8	11	1	1	—	13	14	1	—	1	16	14	2	—	6	22	21	5	2	10	38	29	6	3	12	50	31	6	2	29	68			
Condition not ascertained during the year ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Total on Dispensary Registers at 31st Dec. ... ..	40	—	10	3	53	13	1	3	4	21	24	5	2	6	37	23	4	4	4	35	32	3	8	7	50	51	11	10	14	86	55	18	15	30	118	60	24	22	39	145	59	22	15	31	127	71	28	19	44	162			
Transferred to Pulmonary ... ..	4	1	2	4	11	3	—	—	1	4	—	1	2	2	5	1	—	—	3	4	3	—	1	1	5	2	—	—	2	4	—	—	—	—	—	2	—	—	4	6	—	—	—	—	—	—	—	—	—	—	—	—	
(b) Not now on Dispensary Registers and reasons for removal therefrom.																																																					
Discharged as Recovered—																																																					
Adults—																																																					
Males ... ..	62	12	17	18	109	6	2	2	—	10	7	1	4	1	13	7	—	1	—	8	2	1	1	5	4	1	1	1	7	1	2	—	1	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Females ... ..	30	14	7	20	71	9	4	2	4	19	5	—	2	3	10	10	3	3	4	20	4	7	—	2	13	4	2	1	1	8	1	1	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Children ... ..	151	49	31	122	353	15	6	3	16	40	11	14	4	19	48	16	8	—	21	45	11	4	1	16	32	6	2	1	13	22	1	1	—	9	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Lost sight of, or otherwise removed from Dispensary Registers ... ..	218	39	61	83	401	47	16	13	34	110	42	17	18	16	93	37	5	9	21	72	51	21	11	26	109	43	21	13	26	103	40	7	15	28	90	30	11	16	18	75	17	8	6	11	42	4	3	5	4	16			
Dead—																																																					
Adults—																																																					
Males ... ..	24	5	7	1	37	6	2	—	—	8	4	3	2	—	9	7	1	2	—	10	3	3	3	—	9	6	2	2	1	11	7	3	2	1	13	4	4	4	—	12	4	2	1	—	7	2	2	1	1	6			
Females ... ..	15	4	3	1	23	5	1	—	—	6	6	1	—	—	7	6	1	2	—	9	5	2	1	—	8	—	2	1	1	4	4	1	1	1	7	3	3	—	1	7	4	4	2	—	10	1	1	—	—	2			
Children ... ..	19	9	3	1	32	3	4	1	—	8	4	4	—	1	9	4	2	3	1	10	1	—	—	—	1	5	2	1	1	9	5	—	—	—	5	5	1	1	1	8	3	2	—	—	5	2	—	1	—	3			
Total written off Dispensary Registers ... ..	519	132	129	246	1,026	91	35	21	54	201	79	40	30	40	189	87	20	20	47	174	77	38	17	45	177	68	32	20	44	164	59	15	18	40	132	42	19	21	20	102	28	16	9	11	64	9	6	7	5	27			
GRAND TOTALS of (a) and (b) (excluding those transferred to Pulmonary) ... ..	559	132	139	249	1,079	104	36	24	58	222	103	45	32	46	226	110	24	24	51	209	109	41	25	52	227	119	43	30	58	250	114	33	33	70	250	102	43	43	59	247	87	38	24	42	191	80	34	26	49	189			





In the first column of Table H (a) on pages 74–75 are grouped those persons who first came under public medical treatment previous to 1926. By the end of 1934, therefore, every member of this group then living had been under observation for at least nine years, and the majority for considerably longer periods. The total number of pulmonary cases in the group under consideration is 5,518, but of these a large number, 1,612, have been lost sight of, either on account of their having left the County, or because they have signified they no longer desire public medical treatment, or for a variety of other reasons. Deducting this number, there remains a balance of 3,906 patients, the condition of whom was known at the end of 1934.

These may be analysed as follows :—

PULMONARY TUBERCULOSIS.  Class.	Total number for whom record is available.	Discharged as Recovered.		Disease arrested.		Dead.		Disease not arrested.	
		No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.
T.B. minus . .	1,533	1,254	81·8	61	3·9	211	13·8	7	0·5
T.B. plus, Gp. I	791	311	39·3	49	6·2	364	46	67	8·5
T.B. plus, Gp. II	887	108	12·3	36	4	652	73·5	91	10·2
T.B. plus, Gp. III	695	14	2	1	0·1	668	96·2	12	1·7
All Classes . .	3,906	1,687	43	147	4	1,895	48·5	177	4·5

#### VENEREAL DISEASES.

In the “survey” annual report for the year 1930 are set out at some length the arrangements made by the County Council in connection with the treatment of venereal diseases. These include the provision of a clinic in the county at the Prince of Wales’s Hospital, Tottenham, under an agreement between the County Council and the hospital authorities, together with joint arrangements with London and neighbouring areas. Since the time that report was written no radical alterations have taken place in the Scheme which has functioned very efficiently since its inception in 1916. The extent to which the individual hospitals in the scheme were utilized by Middlesex patients during 1934 is shown in the table on page 79, and on page 80 appears a comparative statement of the work carried out during the past five years.

The extent of the work carried out under the Joint Scheme may be judged from the fact that the total number of new cases from all areas dealt with at the London hospitals during 1934 was 28,123 (a decrease of 591), of which 4,179 (a decrease of 531) were suffering from syphilis, 11,720 (a decrease of 384) gonorrhœa, 165 (a decrease of 30) soft chancre, while 12,059 (an increase of 354) were found to be not suffering from venereal disease. The attendances totalled 1,142,287 (an increase of 45,073), and the number of in-patient days of treatment was 54,089 (an increase of 1,508).

The London hospitals where the largest increase in total attendances of Middlesex patients occurred were :—

St. Mary’s, increased by 6,917.

Royal Northern, increased by 5,988.

West London, increased by 896.

The attendances of patients at the Prince of Wales’s, Tottenham, increased by 5,827.

Included within the scheme are a number of hostels for pregnant women suffering from venereal disease. During the year, twenty Middlesex women in an infective condition were received into these hostels and were given in-patient treatment for venereal disease during pregnancy. They occupied beds for an aggregate of 2,492 days, equivalent to 8·7 per cent. of the total of all participating authorities.

The number of doctors practising in Middlesex who applied during 1934 to be placed on the approved list, enabling them to receive free supplies of arsenobenzene compounds, was ten. The total number now is 107. In addition to these, there is a considerable number of doctors in London, by many of whom Middlesex residents would be treated, who also are on the list of approved practitioners.

*The Prince of Wales’s General Hospital, Tottenham.*—As a result of a revised agreement between the County Council and the Governors of the Prince of Wales’s Hospital, Tottenham, a completely new block for the out-patient treatment of persons suffering from venereal disease was built and equipped by the Hospital at a cost of approximately £3,000. The clinic, which is a most workmanlike unit, contains waiting and consulting rooms, three examination cubicles, four irrigation cubicles,



urethroscopy room, service room, office and sanitary accommodation. The County Council is indebted to Col. L. Harrison of the Ministry of Health for the valuable help and advice he rendered in the designing of the building. The new clinic came into use on the 15th October, 1934, and is proving very convenient and satisfactory.

During the year the Hospital appointed to its staff a whole time venereal diseases medical officer, Dr. A. A. M. Reekie, and made a number of satisfactory alterations in the arrangements for the employment of nurses and orderlies in the department. The result of these various reforms is reflected in the figures returned at the end of 1934. Although the changes had operated for considerably less than a year, the number of new cases seen increased by over 50 per cent. and total attendances made by over 75 per cent. compared with those of the previous year.

*Payment of Travelling Expenses.*—Applications are frequently made to the County Council by hospital almoners on behalf of patients unable to afford fares to and from hospital for out-patient treatment of venereal disease. In all cases information as to financial position as ascertained by the almoners is submitted in support of the application. Treatment of venereal disease frequently is a lengthy process and often necessitates daily attendance at hospital over a long period. It is of the greatest importance in the public interest that every reasonable facility should be given to encourage patients to persevere with the somewhat tedious and lengthy course of treatment necessary if a complete cure is to be effected. In the case of a person of limited means, the difficulty of finding the cost of fares over a period of weeks or months may prove a serious obstacle to regular attendance. During 1934, assistance towards the payment of fares was granted to 114 individual patients, at a cost of £207 8s. 5d.

Statement of Work done by individual Hospitals in connection with Middlesex Patients during 1934.

Hospital.	NEW CASES.					Total attendances.	No. of in-patient days.	Arsenobenzene compounds. Doses given.
	Syphilis.	Soft Chancre.	Gonorrhoea.	Conditions other than venereal.	Total.			
Gt. Ormond Street ..	2	—	9	85	96	687	518	140
Guy's .. ..	6	—	24	23	53	1,479	12	119
King's College ..	—	—	—	3	3	46	—	—
L.C.C. Clinic, White-chapel .. ..	6	—	8	16	30	1,776	22	130
Metropolitan ..	—	—	9	3	12	1,093	—	8
Middlesex .. ..	5	—	19	5	29	1,498	2	31
Royal Free .. ..	12	—	65	81	158	2,881	251	243
Royal Northern ..	56	—	171	118	345	21,231	41	936
St. George's .. ..	13	—	45	28	86	1,427	—	147
St. Mary's .. ..	36	—	154	121	311	12,184	232	965
St. Paul's .. ..	18	—	86	53	157	5,461	197	297
St. Thomas's .. ..	28	4	101	177	310	5,630	181	341
Seamen's .. ..	—	—	4	1	5	27	68	2
South London for Women .. ..	—	—	—	1	1	1	—	—
University College ..	16	—	38	15	69	4,145	127	340
West London .. ..	110	—	279	497	886	28,117	899	2,355
Westminster .. ..	8	—	6	3	17	893	—	116
Salvation Army Mothers Children's, Waddon ..	—	—	11	18	29	323	197	—
	—	—	4	—	4	—	463	—
Joint London Hospitals, Totals.. ..	316	4	1,033	1,248	2,601	88,899	3,210	6,170
*Prince of Wales's, Tottenham .. ..	118	—	217	158	493	13,344	132	1,700
GRAND TOTAL ..	434	4	1,250	1,406	3,094	102,243	3,342	7,870

\* These figures do not include 74 new cases not residents of the County but treated at the hospital, the cost being borne by the Middlesex County Council under agreement with the hospital.

Middlesex Patients treated at

	London Hospitals.					Prince of Wales's Hospital, Tottenham.*					
	1930.	1931.	1932.	1933.	1934.	1930.	1931.	1932.	1933.	1934.	
Number of persons dealt with at the Clinics for the first time and found to be suffering from :—											
	Syphilis .. .. .	413	412	440	356	316	79	87	105	61	118
	Soft chancre .. .. .	5	5	13	7	4	—	2	2	6	—
	Gonorrhoea .. .. .	943	881	1,032	1,060	1,033	98	89	92	127	217
	Conditions other than venereal .. .. .	961	1,079	1,099	1,083	1,248	102	94	106	131	158
	Totals .. .. .	2,322	2,377	2,584	2,506	2,601	279	272	305	325	493
Total attendances .. .. .	59,168	62,044	69,760	81,165	88,899	6,085	6,411	6,960	7,519	13,344	
Number of “in-patient” days of treatment .. .. .	2,588	3,618	2,778	3,271	3,210	42	175	315	214	132	
	4,479	5,565	6,091	6,710	6,170	598	613	818	672	1,700	
Number of doses of arsenobenzene compounds given .. .. .											

\* These figures do not include patients not residents of the County, but treated at the hospital, the cost being borne by the Middlesex County Council under the agreement with the hospital.



## APPENDICES.

I.—Annual Report by Dr. Ivor Lewis, Medical Superintendent of North Middlesex County Hospital.

II.—Annual Report by Dr. J. N. Deacon, Medical Superintendent of Redhill County Hospital.

III.—Annual Report by Dr. W. E. Turner, Medical Superintendent of Central Middlesex County Hospital.

IV.—Annual Report by Dr. J. B. Cook, Medical Superintendent of West Middlesex County Hospital.

V.—Annual Report by Dr. W. A. Steel, Medical Superintendent of Hillingdon County Hospital.

VI.—Report of the Public Health and Public Assistance Committee to the County Council on the appropriation of County Poor Law Hospitals as hospitals under the Public Health Acts.

# ANNUAL REPORT ON THE WORK OF THE NORTH MIDDLESEX COUNTY HOSPITAL DURING 1934, PREPARED BY THE MEDICAL SUPERINTENDENT.

## Staff

(31st December, 1934).

### WHOLE-TIME MEDICAL STAFF.

#### *Medical Superintendent—*

Ivor Lewis, M.D., M.S. (Lond.), D.P.H.

#### *Deputy Medical Superintendent—*

A. W. Gregorson, M.D. (Glas.), Ch.B., F.R.F.P.S.

#### *Physician—*

C. Allan Birch, M.D., M.R.C.P. (Lond.), D.P.H.

#### *Surgeon—*

R. L. Galloway, M.B., Ch.B., F.R.C.S. (Edin.).

#### *Assistant Medical Officers—*

K. A. Hudson, M.B., Ch.M., M.C.O.G.

E. B. Jackson, M.D., M.R.C.P. (Lond.).

F. N. Foster, M.B., Ch.B., F.R.C.S. (Eng.).

M. R. Thomas, M.D., M.R.C.P. (Lond.).

P. J. Nagle, M.B., B.Ch., B.A.O.

Miss M. Sutcliffe, M.R.C.S., L.R.C.P., D.P.H.

Miss A. McCabe, M.D. (Dub.), M.R.C.P., D.P.H.

Miss E. A. Pennyquick, M.B., Ch.B.

M. Coke, M.R.C.S., L.R.C.P.

Miss M. A. Bromhall, M.B., Ch.B., D.M.R.E.

A. Burkhardt, M.B., B.S.

R. S. Ogborn, M.B., B.S., M.R.C.P., (Lond.).

### VISITING MEDICAL STAFF.

#### *Laryngologists—*

L. G. Brown, M.D., F.R.C.S.

F. D. Cairns, F.R.C.S.

#### *Ophthalmic Surgeon—*

Miss F. Ramsay, M.D., B.S., D.O.M.S.

#### *Radio-therapist.*

B. W. Windeyer, M.B., B.S., F.R.C.S. (Edin.).

#### *Radiologists—*

E. E. Holdsworth, M.B., Ch.B., D.M.R.E.

N. P. Henderson, M.B., Ch.B., D.M.R.E.

#### *Electro-therapist.*

P. Figdor Ashton, M.B., Ch.B.

#### *Pathologist—*

T. H. C. Benians, F.R.C.S. (Eng.).

#### *Anæsthetists—*

F. P. de Caux, L.R.C.P., M.R.C.S.

J. H. T. Challis, L.R.C.P., M.R.C.S.

#### *Dental Surgeon—*

G. E. Royston, L.D.S.

### NURSING STAFF.

#### *Matron—*

Miss L. F. Dykes.

Administrative Sisters	..	..	..	11	Staff Nurses	..	..	..	43
Departmental Sisters	..	..	..	7	Staff-Nurse-Midwifery Pupils	..	..	..	23
Ward and Night Sisters	..	..	..	31	Probationer Nurses	..	..	..	161
Masseuses	..	..	..	8	Mental Nurses	..	..	..	7
Male Nurses..	..	..	..	16	Assistant Nurses	..	..	..	28

#### *Steward—*

D. E. Bell.

#### *Chaplain—*

Rev. H. C. Scott.



### General Observations.

The Hospital's work has proceeded under full pressure throughout the whole year. For a great deal of the time much anxiety was caused by the demands on the accommodation by cases of acute illness and it was possible to carry on only by prematurely discharging large numbers of patients, generally by ambulance. This lack of accommodation and overcrowding has now become a constant problem eight months out of twelve. In this last year the number of admissions has increased to 12,669, giving an *average* for every day of 34·6—two more than last year. Similarly, the average length of stay has been reduced to 26·24 days—over two days less. The work of admission and examination of new patients has been vastly improved by the new receiving room arrangements, which have been developed to the full during the year. A new appointment of Receiving Room Medical Officer was created, and the Hospital has been most fortunate in the first holder of the post, Dr. R. S. Ogborn, who has carried out the arduous duties with high efficiency.

During the year the Hospital also lost the services, through resignation, of Mr. Hugh Blauvelt, who had been a surgical officer of outstanding merit. The position was filled by the appointment of Mr. F. N. Foster. Dr. M. A. Bromhall was appointed whole time Radium Officer. Other new arrivals on the medical staff were Miss A. McCabe, Dr. M. R. Thomas and Miss Mary Sutcliffe.

As a result of the reorganisation, the radiotherapy department is now running a full working week, both radium and deep X-ray plant. The latter was overhauled during the year—entirely re-wired and a new control table fitted. Moreover, the valves were discarded and replaced by new copper oxide rectifiers—the first of their kind in England.

Other new technical equipment added during the year included a Cambridge electrocardiograph and a basal metabolism machine—both of which have proved of the greatest value in the elucidation of heart and thyroid disorders respectively.

During the year a new departure was taken in having “standard chest” X-rays of every member of the staff on appointment. Already from over 300 examinations, four cases of lung disease have been detected at an early stage and otherwise unsuspected. These records are of the greatest value, not only to the prospective member of the staff but also to the County Council. In case of pulmonary tuberculosis, particularly, they enable it to be determined with certainty whether the disease arose since appointment.

The County Council has commenced the extension of 90 beds to the nurses' home. In the meantime 47 sisters and staff nurses have continued to live out, in addition to the 16 pupil-midwives accommodated at St. Katherine's College.

In the course of the year, periods of study-leave were granted to Mr. Hudson, who was appointed a Member of the College of Obstetricians and Gynæcologists, and to Dr. E. B. Jackson, who became an M.D. of the University of London. This excellent method of rewarding good service, while at the same time promoting the still further efficiency of the Hospital, has been very greatly appreciated, and the Committee's wise generosity in the matter has recently been extended to senior members of the nursing staff, wishing to take courses such as house-keeping. The Nurses' Training School has continued to thrive, securing a very high percentage of successes at both the State Examinations—22 out of 23 and 49 out of 50 :—

					<i>Entries.</i>	<i>Successes.</i>
State Examination, Preliminary	..	..	..	..	50	49
„ „ Final	..	..	..	..	23	22
Central Midwives Board	..	..	..	..	60	53
County Nurses' Examination	..	..	..	..	25	22*

\* One with honours, ten with credit.

### Statistical Tables for the Year ended 31st December, 1934.

						<i>Patients.</i>	<i>Staff.</i>
Remaining in hospital, 1st January, 1934	..	..	..	..	..	918	3
Admitted during the year	..	..	..	..	..	11,246	100
Born in hospital	..	..	..	..	..	1,287	—
						————	————
							13,554
Discharged	..	..	..	..	..	10,965	103
Died	..	..	..	..	..	1,601	—
Patients treated to a conclusion during the year	..	..	..	..	..	————	————
							12,669
							————
Remaining in hospital 31st December, 1934	..	..	..	..	..	855	—
						————	————
							885

I.—TABLE SHOWING HOW THE PATIENTS TREATED TO A CONCLUSION DURING THE YEAR WERE  
ORIGINALLY ADMITTED.

By order of Clerk, County Medical Officer, Director of Public Assistance, or Local Public Assistance Officer .. .. .	12
By Relieving Officers' orders .. .. .	6,103
By Medical Superintendent—	
Births .. .. .	1,342
Police cases (other than accidents) .. .. .	78
Accidents .. .. .	911
Maternity cases (emergency) .. .. .	147
Other urgent cases .. .. .	3,781
Transfers from Institution or Home—M.C.C. .. .. .	155
Transfers from hospital—M.C.C. .. .. .	37
Transfers from hospital or institution—other authority .. .. .	103
	<hr/>
	12,669
	<hr/>

II.—TABLE SHOWING THE DISTRICTS TO WHICH THE PATIENTS TREATED BELONGED.

Edmonton .. .. .	3,456
Enfield .. .. .	1,953
Finchley .. .. .	93
Hornsey .. .. .	1,246
Southgate .. .. .	957
Tottenham .. .. .	3,249
Wood Green .. .. .	1,281
Other districts of Middlesex .. .. .	185
Essex .. .. .	156
Hertfordshire .. .. .	83
Other counties .. .. .	10
	<hr/>
	12,669
	<hr/>

III.—TABLE SHOWING THE RESULTS OF TREATMENT OR THE TERMINATION,  
TOGETHER WITH ANALYSES OF DEATHS IN AGE AND OTHER GROUPS.

Relieved .. .. .	10,051	79·33 per cent.
Unrelieved .. .. .	1,017	8·03 „
Died .. .. .	1,601	12·64 „
	<hr/>	<hr/>
	12,669	100·00 „
	<hr/>	<hr/>

*Analysis of Deaths in Age Groups.*

Ages.								Male.	Female.	Total.
Under 1 year .. .. .								48	53	101
1- 2 years .. .. .								5	1	6
2- 5 years .. .. .								4	5	9
5-15 years .. .. .								24	17	41
15-25 years .. .. .								40	32	72
25-35 years .. .. .								46	37	83
35-45 years .. .. .								58	44	102
45-55 years .. .. .								101	69	170
55-65 years .. .. .								134	127	261
65-75 years .. .. .								214	163	377
Over 75 years .. .. .								170	209	379
								<hr/>	<hr/>	<hr/>
								844	757	1,601



Deaths within 24 hours of admission .. ..	245 (15·30 per cent.).
„ 24 to 48 „ „ „ .. ..	101 ( 6·30 „ ).
„ 48 to 72 „ „ „ .. ..	93 ( 5·80 „ ).
	<hr/> 439
All other deaths .. ..	1,162 (72·6 „ ).
	<hr/> 1,601
Total .. ..	<hr/>

The 245 deaths which occurred within 24 hours of admission may be classified as follows :—

Injuries ... ..	30
Terminal stage :—	
Acute diseases ... ..	53
Chronic diseases ... ..	94
Other deaths within 24 hours ... ..	68
	<hr/> 245
	<hr/>

#### IV.—DISCHARGES.

Number of patients discharged to the out-patients' department 2,061

Number of patients transferred—

(a) To mental hospitals .. ..	234
(b) To infectious diseases hospitals .. ..	66
(c) To convalescent homes .. ..	152
(d) To other hospitals .. ..	67
(e) To sanatoria .. ..	46

#### V.—AVERAGES DURING THE YEAR.

Beds, average daily number occupied .. ..	910·84
Patients per occupied bed, average number .. ..	13·9
Admissions, average daily number .. ..	34·61
Stay, average length in days per patient .. ..	26·24

Maximum number of beds occupied = 996 on 12th January.

Minimum number of beds occupied = 812 on 25th December.

#### VI.—MENTAL PATIENTS.

	Men.	Women.	Children.	Total.
Remaining in Hospital, 1.1.34 .. ..	6	10	—	16
Patients admitted .. ..	228	304	1	533
„ discharged .. ..	125	153	—	278
„ transferred to Mental Hospital .. ..	95	140	1	236
„ died .. ..	7	11	—	18
Remaining in Hospital, 31.12.34 .. ..	7	10	—	17

Percentage sent to Mental Hospital :—Men, 40·6 per cent. ; Women, 44·5 per cent.

Disease or Condition.	Males.			Females.			Infants.			Totals.
	Relieved.	Unrelieved.	Died.	Relieved.	Unrelieved.	Died.	Relieved.	Unrelieved.	Died.	
Births .. .. .	—	—	—	—	—	—	1,285	—	57	1,342
Infants with mothers .. .. .	—	—	—	—	—	—	—	8	—	8
No disease and unsubstantiated diagnosis.. .. .	30	18	—	32	16	—	20	13	—	129
Diseases caused by infection—										
Diphtheria, erysipelas, scarlet fever, cerebro-spinal fever	4	2	3	2	6	1	4	5	—	27
Measles, varicella, pertussis, mumps	—	—	—	2	—	—	6	—	—	8
Septicæmia, pyæmia, tetanus	1	—	5	4	—	6	9	—	2	27
Typhoid fever .. .. .	—	—	—	—	—	—	—	—	—	—
Influenza, influenzal pneumonia	15	—	1	23	—	—	6	—	1	46
Tuberculosis—pulmonary .. .. .	50	24	48	52	21	44	2	2	1	244
" non-pulmonary	15	2	9	13	1	2	17	1	8	68
Rheumatism, chorea	36	2	4	71	2	3	92	3	6	219
Venereal disease .. .. .	3	7	4	2	5	—	2	4	—	27
Diseases due to parasites .. .. .	4	—	—	—	—	—	3	—	—	7
Diseases of the—										
Nervous system .. .. .	72	33	14	56	19	14	28	1	3	240
Eye .. .. .	15	1	—	11	3	—	23	—	—	53
Ear .. .. .	32	4	1	35	2	—	168	5	4	251
Nose and accessory sinuses	22	1	4	29	2	3	19	1	—	81
Circulatory system—										
Endocarditis .. .. .	—	—	4	7	1	1	—	—	1	14
Myocarditis .. .. .	10	5	113	23	6	132	1	—	—	290
Valvular disease of the heart .. .. .	10	4	5	20	9	15	4	—	4	71
Disordered action of the heart.. .. .	18	4	8	14	7	15	—	—	1	67
Heart, other diseases .. .. .	4	—	3	6	—	4	—	—	—	18
Arterio-sclerosis .. .. .	12	7	4	7	9	5	—	—	—	44
Cerebral thrombosis .. .. .	20	8	96	18	5	76	—	—	—	223
Arteries, other diseases.. .. .	6	—	3	9	—	4	—	—	—	22
Varicose veins, phlebitis	18	—	2	43	—	3	—	—	—	66
Capillaries .. .. .	—	1	2	1	1	—	—	—	—	5
Blood, spleen, lymphatics .. .. .	37	4	7	22	3	6	71	1	1	152
Endocrine glands .. .. .	3	—	4	10	1	—	—	—	—	18
Breast .. .. .	—	—	—	26	1	—	2	—	—	29



Disease or Condition.	Males.			Females.			Infants.			Totals.
	Relieved.	Unrelieved.	Died.	Relieved.	Unrelieved.	Died.	Relieved.	Unrelieved.	Died.	
Respiratory system—										
Laryngitis .. .. .	—	—	—	1	—	—	2	—	—	3
Bronchitis, acute ..	33	—	3	25	—	1	103	3	—	168
" chronic .. .	68	7	31	65	9	9	6	—	—	195
Bronchiectasis, asthma ..	9	—	2	25	—	2	4	—	1	43
Broncho-pneumonia ..	35	—	31	32	—	41	143	3	26	311
Lobar pneumonia ..	61	—	37	19	—	7	31	—	1	156
Lungs and other diseases ..	8	1	3	8	2	—	1	—	3	26
Pleurisy and empyema ..	36	—	3	30	2	3	23	—	6	103
Digestive system—										
Teeth, gums, lips, mouth, tongue ..	11	—	—	20	1	—	18	1	—	51
Tonsils .. .	47	—	1	95	—	1	61	1	—	206
Salivary glands .. .	1	—	—	1	—	—	1	—	—	3
Naso-pharynx and pharynx ..	3	1	—	5	—	2	4	—	—	15
Gastric ulcer (simple) ..	42	—	4	38	—	—	—	—	—	84
Perforated gastric ulcer ..	9	—	4	—	—	2	—	—	—	15
Duodenal ulcer (simple) ..	42	4	4	8	—	—	—	—	—	58
Perforated duodenal ulcer ..	26	—	5	4	—	1	—	—	—	36
Stomach and duodenum—other conditions ..	43	—	3	42	2	—	44	1	4	139
Appendicitis, acute ..	136	—	3	126	1	2	86	—	1	355
" " with local abscess ..	16	—	1	15	—	3	16	—	1	52
" " " peritonitis ..	3	—	—	14	—	3	3	—	—	23
" " " general peritonitis ..	21	—	7	5	—	4	9	—	3	49
" " sub-acute or chronic ..	39	—	—	53	—	—	13	—	—	105
Intestinal obstruction—										
Constipation .. .	30	—	—	68	5	—	27	—	—	130
Adhesions.. .	3	—	—	2	—	2	—	—	—	7
Band .. .	3	—	1	3	—	3	—	—	—	10
Intussusception ..	—	—	—	—	—	—	5	—	2	7
Volvulus .. .	1	—	1	2	—	—	—	—	—	4
Others .. .	3	—	3	—	—	1	—	—	—	7
Intestines, other conditions ..	25	3	1	35	2	3	29	—	1	99
Rectum and anus ..	43	2	1	23	1	1	2	—	—	73





VIII. DISEASES AND CONDITIONS TREATED TO A CONCLUSION.  
(Groups arranged in order of frequency.)

				<i>Discharges.</i>	<i>Died.</i>	<i>Total treated.</i>
Pregnancy, parturition, puerperium	..	..		2,017	15	2,032
Diseases of the digestive system	..	..	..	1,733	110	1,843
Births	..	..	..	1,285	57	1,342
Injuries	..	..	..	1,004	91	1,095
Diseases of the respiratory system	..	..	..	795	210	1,005
Diseases of the circulatory system	..	..	..	319	501	820
Tumours and cysts	..	..	..	405	270	675
Diseases caused by septic infection	..	..		518	148	666
Mental diseases	..	..	..	622	37	659
Diseases of the nervous system	..	..	..	582	43	625
Diseases of the generative system	..	..	..	442	17	459
Diseases of areolar tissue and skin	..	..	..	343	13	356
Diseases of the organs of locomotion	..	..		314	8	322
Diseases of the urinary system	..	..	..	253	41	294
Diseases of blood, spleen and lymphatic system	..			138	14	152
Other 8 groups	..	..	..	298	26	324
Totals				11,068	1,601	12,669

1. Department of Surgery.

Analysis of Operations performed during the year.

Operations.	In-Patients.		Out-Patients.	Totals.
	Major.	Minor.	Minor.	
On skin and superficial structures .. .. .	9	257	514	780
On arteries, veins and lymphatics .. .. .	—	102	—	102
On nerves .. .. .	—	4	—	4
On bones and joints .. .. .	157	243	235	635
On muscles, tendons, bursæ and fasciæ .. .. .	—	41	—	41
Amputations .. .. .	14	24	7	45
On skull, brain and spine .. .. .	12	5	—	17
On face .. .. .	—	11	—	11
On eye .. .. .	6	15	11	32
On mouth, pharynx and œsophagus .. .. .	—	33	2	35
On ear, nose and throat .. .. .	157	148	905	1,210
On thyroid, accessory glands and neck .. .. .	7	30	—	37
On breast .. .. .	24	18	—	42
On thorax and contents .. .. .	33	3	—	36
On abdominal wall and cavity .. .. .	309	13	—	322
On stomach and duodenum .. .. .	88	—	—	88
On intestine, rectum and anus .. .. .	565	83	1	649
On liver, gall bladder, pancreas and spleen .. .. .	44	—	—	44
On kidney and urinary tract .. .. .	80	207	—	287
On male generative organs .. .. .	36	39	142	217
Obstetrical .. .. .	103	506	—	609
On female generative organs .. .. .	227	547	—	774
On infants in maternity dept. .. .. .	1	16	—	17
Totals .. .. .	1,872	2,345		
	4,217		1,817	6,034

On Skin and Superficial Structures (266).

This includes débridement of wounds, incision and drainage abscesses, skin grafts, &c.

Orthopædic Operations. (On Bones and Joints (438), on Muscles, Tendons, Bursæ and Fasciæ (41).)

On Abdominal Wall and Cavity (322) (abdominal sections, 106).

Herniotomy .. .. .	203
Laparotomy .. .. .	106
Others .. .. .	13

On Stomach and Duodenum (88).

Gastrectomy, Gastrostomy, &c. .. .. .	9
For peptic ulcer .. .. .	45
Gastro-enterostomy .. .. .	32
Others .. .. .	2



*On Intestines, Rectum and Anus (648) (abdominal sections, 563).*

Appendicectomy without drainage	..	..	..	..	..	369
Appendicectomy with drainage	..	..	..	..	..	129
Drainage of appendix abscess	..	..	..	..	..	19
Anastomosis	..	..	..	..	..	13
Enterostomy/colostomy	..	..	..	..	..	15
Diverticulectomy	..	..	..	..	..	2
Others	..	..	..	..	..	101

*On Gall-Bladder, Pancreas and Spleen (44).*

Cholecystectomy/cholecystostomy	..	..	..	..	..	39
Splenectomy	..	..	..	..	..	2
Others	..	..	..	..	..	3

*On Kidney and Urinary Tract (287) (abdominal sections, 12).*

Nephrectomy	..	..	..	..	..	11
Transplantation of ureters	..	..	..	..	..	—
Nephrotomy/nephrolithotomy	..	..	..	..	..	3
Others	..	..	..	..	..	273

*On Male Generative Organs (75).*

Supra-pubic prostatectomy	..	..	..	..	..	36
Others	..	..	..	..	..	39

*On Female Generative Organs (774) (abdominal sections, 131).*

Pan-hysterectomy	..	..	..	..	..	3
Total hysterectomy	..	..	..	..	..	6
Sub-total hysterectomy	..	..	..	..	..	21
Vaginal hysterectomy	..	..	..	..	..	3
Oöphorectomy/salpingectomy/salpingo-oöphorectomy	..	..				66
Radium insertions	..	..	..	..	..	54
Gillian for retroversion	..	..	..	..	..	15
Ventro-fixation of uterus	..	..	..	..	..	7
Plastic operations on cervix and vagina	..	..	..	..	..	74
Various on tubes, ovaries and uterus	..	..	..	..	..	57
Various on vagina and vulva	..	..	..	..	..	20
Examinations under anæsthetic	..	..	..	..	..	25
Uterine curettage	..	..	..	..	..	411
Miscellaneous	..	..	..	..	..	12

## 2. Maternity Department.

*Ante-natal Clinic.*

Number of ante-natal sessions held .. .. .	142
Expectant mothers examined .. .. .	1,503
Total attendances .. .. .	9,199
Average number seen per session .. .. .	64.78
Average number of attendances per expectant mother .. .. .	6.12
Women referred for dental treatment .. .. .	340
Women referred for X-ray examination .. .. .	130

*Maternity Ward Block.*

In the course of the year 1,397 women were delivered in the department and gave birth to 1,415 children.

*Analysis of the 1,397 Deliveries during the Year.*

						Per cent.
Mother admitted ..	Via ante-natal clinic .. .. .				1,273	91.12
	Not via ante-natal clinic .. .. .				124	8.88
	Total .. .. .				1,397	100.00
Civil state .. ..	Married .. .. .				1,314	94.06
	Widowed .. .. .				1	.07
	Unmarried .. .. .				82	5.87
	Total .. .. .				1,397	100.00
Parous state ..	Primipara .. .. .				697	49.89
	Multipara .. .. .				700	50.11
	Total .. .. .				1,397	100.00
Presentation ..	Vertex—occipito-anterior .. .. .				1,260	
	Vertex—occipito-posterior .. .. .				30	
	Face and brow .. .. .				9	
	Breech—uncomplicated .. .. .				53	
	Breech—complicated .. .. .				5	
	Transverse .. .. .				5	
	Born before admission .. .. .				53	
Total .. .. .					1,415	

18 sets of twins included in above.



Table showing the method of Delivery of the 1,415 Babies Born in the Department.

Method of delivery.	Births.	Deaths.		
		Maternal.	Fœtal.	Neo-natal.
Head presentation—natural forces.. ..	1,062	3	17	26
Breech—Natural forces and manual delivery ..	58	—	7	8
Natural forces after rupture of membranes ..	10	—	6	3
Natural forces after induction of labour .. ..	154	—	15	7
Natural forces after perforation .. ..	1	—	1	—
Scalp traction .. ..	10	—	5	1
Internal version .. ..	11	—	5	—
Version and leg traction .. ..	8	—	7	1
Decapitation .. ..	1	—	1	—
Forceps .. ..	60	2	5	5
Forceps after induction .. ..	8	—	—	—
Craniotomy .. ..	5	—	5	—
Cæsarean section .. ..	27	—	1	5
Total .. ..	1,415	5	75	56

Births—							Per cent.	
Full time .. ..	..	..	..	..	..	..	1,065	75·26
Post-mature .. ..	..	..	..	..	..	..	5	·36
Premature .. ..	..	..	..	..	..	..	270	19·08
Still-born .. ..	..	..	..	..	..	..	75	5·30
Total .. ..							1,415	100·00

Infants—								
Breast fed .. ..	..	..	..	..	..	..	871	65
Supplementary and artificially fed .. ..	..	..	..	..	..	..	469	35
Total .. ..							1,340	100

Obstetrical Operations\* (609). (Abdominal Sections, 29.)

Surgical induction .. ..	..	..	..	..	..	..	..	14
Internal version .. ..	..	..	..	..	..	..	..	11
Application of forceps .. ..	..	..	..	..	..	..	..	68
Scalp traction .. ..	..	..	..	..	..	..	..	10
Leg brought down .. ..	..	..	..	..	..	..	..	8
Cæsarean section .. ..	..	..	..	..	..	..	..	28
Perforation skull .. ..	..	..	..	..	..	..	..	1
Craniotomy .. ..	..	..	..	..	..	..	..	5
Decapitation .. ..	..	..	..	..	..	..	..	1
Manual removal of placenta .. ..	..	..	..	..	..	..	..	7
Episiotomy and repair .. ..	..	..	..	..	..	..	..	15
Repair of ruptured perineum .. ..	..	..	..	..	..	..	..	371
Repair of vaginal lacerations .. ..	..	..	..	..	..	..	..	65
Uterine plugging.. ..	..	..	..	..	..	..	..	1
Miscellaneous .. ..	..	..	..	..	..	..	..	2
Manual delivery under anæsthetic .. ..	..	..	..	..	..	..	..	2

Operations on Infants.\*

Exploratory laparotomy .. ..	..	..	..	..	..	..	1
Plastic operation for hare lip .. ..	..	..	..	..	..	..	1
Circumcision .. ..	..	..	..	..	..	..	15

\* Included in the table on page 11.

Maternal Mortality.

Total deaths, 8.    Rate per 1,000 delivered, 5·73.

Whether admitted via ante-natal clinic.	Mode of Delivery.	Maternal Complications.	Number of Cases.
No	Undelivered ..	Toxic accidental hæmorrhage .. .. .	1
No	Undelivered ..	Eclampsia .. .. .	1
Yes	Natural forces ..	Eclampsia .. .. .	1
No	Forceps ..	Eclampsia .. .. .	1
No	Natural forces ..	Shock following normal confinement ..	1
No	Natural forces ..	Acute inversion of uterus .. .. .	1
No	Forceps ..	Syncope .. .. .	1
Yes	Undelivered ..	Asphyxia by plug of mucus from naso- pharynx, obstructing larynx	1

Pyrexia in the Puerperium.

Cases are classified as pyrexial where a rise of temperature occurs in the puerperium to 100·4° F. or over, and is sustained at this level for 24 hours, or recurs during that period.

Mode of Delivery.	Causation of Pyrexia.	No. of Cases.
Natural forces                      ...                      ...                      ...	Perineal sepsis                      ...                      ...                      ...	2
	Pyelitis                      ...                      ...                      ...	6
	Post-sacral abscess                      ...                      ...                      ...	1
	Tonsillitis                      ...                      ...                      ...	1
	Mastitis                      ...                      ...                      ...	7
	Salpingitis                      ...                      ...                      ...	1
	Cystitis                      ...                      ...                      ...	2
	Pulmonary tuberculosis                      ...                      ...                      ...	1
	Post-partum eclampsia                      ...                      ...                      ...	1
	Scarlet fever                      ...                      ...                      ...	1
	Retained membranes                      ...                      ...                      ...	1
	Retention of lochia                      ...                      ...                      ...	1
	Uterine infection                      ...                      ...                      ...	11
	Unknown                      ...                      ...                      ...	2
Natural forces after induction                      ...                      ...                      ...	Retained lochia                      ...                      ...                      ...	1
	Pyelitis                      ...                      ...                      ...	2
	Cystitis                      ...                      ...                      ...	2
	Unknown                      ...                      ...                      ...	1
Forceps...                      ...                      ...                      ...	Perineal sepsis                      ...                      ...                      ...	1
	Bronchitis                      ...                      ...                      ...	1
	Cystitis                      ...                      ...                      ...	1
	Uterine infection                      ...                      ...                      ...	1
Forceps after induction                      ...                      ...                      ...	Pyelitis                      ...                      ...                      ...	2
	Perineal sepsis                      ...                      ...                      ...	1
Cæsarean Section                      ...                      ...                      ...	Pyelitis                      ...                      ...                      ...	1
Traction                      ...                      ...                      ...	Unknown                      ...                      ...                      ...	1
Craniotomy                      ...                      ...                      ...	Cystitis                      ...                      ...                      ...	1
		54

Pyrexial rate = 38·6 per 1,000 deliveries.

Infant Mortality.

Infants—	Per cent.
Born and survived .. .. .	1,284 90·74
Born and died .. .. .	56 3·96
Stillborn .. .. .	75 5·30
Total .. .. .	1,415 100·00



Stillbirths.

Details of the 75 Stillbirths.

No. of Infants.	Delivered by	Causation.	Mother.		Infant.	
			Primi-para.	Multi-para.	Full term.	Premature.
17	Natural forces—Cephalic presentation	Maternal toxæmia ... ..	3	5	3	5
		Placental infraction ... ..	—	1	—	1
		Postmaturity ... ..	—	1	1	—
		Fœtal anasarca ... ..	—	1	1	—
		Anencephaly ... ..	—	1	—	1
		Intracranial hæmorrhage ... ..	1	—	1	—
		Asphyxia, cord around neck ... ..	1	—	1	—
		Unknown ... ..	1	2	1	2
7	Breech ... ..	Maternal toxæmia ... ..	1	1	—	2
		Accidental hæmorrhage ... ..	—	1	1	—
		Intracranial hæmorrhage ... ..	2	—	2	—
		Asphyxia ... ..	—	2	1	1
6	Natural forces after rupture of membranes	Placenta prævia ... ..	—	1	—	1
		Accidental hæmorrhage ... ..	1	4	2	3
15	Natural forces after induction	Maternal toxæmia ... ..	3	3	3	3
		Anencephaly ... ..	1	—	—	1
		Asphyxia ... ..	—	1	1	—
		Intracranial hæmorrhage ... ..	—	1	—	1
		Prolapsed cord ... ..	1	—	—	1
		Unknown ... ..	1	4	3	2
1	Natural forces after perforation	Hydrocephalus ... ..	1	—	1	—
5	Scalp traction ... ..	Placenta prævia ... ..	1	2	2	1
		Placenta prævia and anencephaly ... ..	—	1	—	1
		Accidental hæmorrhage ... ..	—	1	—	1
5	Internal version ... ..	Fœtal exhaustion — obstructed labour	—	4	3	1
		Accidental hæmorrhage ... ..	—	1	—	1
7	Version and leg traction ... ..	Placenta prævia ... ..	—	7	2	5
5	Forceps ... ..	Fœtal exhaustion ... ..	3	—	3	—
		Prolapsed cord ... ..	2	—	—	2
1	Decapitation ... ..	Fœtal exhaustion — obstructed labour	1	—	—	1
5	Craniotomy ... ..	Fœtal exhaustion — obstructed labour	3	2	5	—
1	Cæsarean section ... ..	Asphyxia ... ..	1	—	1	—
			28	47	38	37
			75		75	

Summary of Cause of Stillbirths.

						Per cent.
Maternal conditions	..	..	..	..	37	49·33
Complications of labour	..	..	..	..	6	8·0
Fœtal conditions	..	..	..	..	24	32·0
Not known	..	..	..	..	8	10·67
Total						75 100·00

## Neo-natal deaths.

(In hospital and within four weeks of birth.)

No. of Infants.	Delivered by	Maternal Complications.	Cause of Death.	Age.
1	Natural forces ...	Nil ...	Prematurity ...	4 days.
1	" " ...	Nil ...	" ...	5 hours.
1	" " ...	Nil ...	" ...	13 mins.
1	" " ...	Nil ...	" ...	10 days.
1	" " ...	Nil ...	" ...	5 days.
1	" " ...	Nil ...	" ...	6 days.
1	" " ...	Accidental hæmorrhage ...	" ...	$\frac{1}{2}$ hour.
1	" " ...	" " ...	" ...	7 hours.
1	" " ...	Toxæmia ...	" ...	$2\frac{3}{4}$ hours.
1	" " ...	" ...	" ...	1 day.
1	" " ...	Placenta prævia ...	" ...	4 hours.
1	" " ...	Twins ...	" ...	14 hours.
1	" " ...	" ...	" ...	1 day.
1	" " ...	" ...	" ...	5 hours.
1	" " ...	" ...	" ...	9 hours.
1	" " ...	Eclampsia ...	" ...	7 days.
1	" " ...	" ...	" ...	5 days.
1	" " ...	Lateral placenta prævia ...	" ...	7 days.
1	" " ...	Pre-eclamptic toxæmia ...	" ...	3 days.
1	" " ...	Cystitis ...	" ...	4 days.
1	" " ...	Toxæmia—twins ...	" ...	5 days.
1	" " ...	Chronic nephritis ...	" ...	$6\frac{1}{2}$ hours.
1	" " ...	Nil ...	Acholuric jaundice ...	2 days.
1	" " ...	Nil ...	Intracranial hæmorrhage ...	2 days.
1	" " ...	Toxæmia ...	" " ...	3 days.
1	" " ...	" ...	" " ...	2 days.
1	" " ...	Contracted pelvis ...	" " ...	1 day.
1	" " ...	Antepartum eclampsia ...	" " ...	9 hours.
1	" " ...	Pyelitis ...	" " ...	1 hour.
1	" " ...	Nil ...	Marasmus ...	19 days.
1	" " ...	Nil ...	" ...	14 days.
1	" " ...	Primary inertia ...	" ...	14 days.
1	" " ...	Nil ...	Melæna Neonatorum ...	2 days.
1	" " ...	Toxic accidental hæmorrhagic ...	Pulmonary atelectasis ...	$2\frac{1}{2}$ hours.
1	" " ...	Prolonged 2nd stage ...	Cerebral lacerations ...	1 day.
1	" " ...	Nil ...	Broncho-pneumonia ...	6 days.
1	" " ...	Pre-eclamptic toxæmia ...	" " ...	10 days.
1	" " ...	Albuminuria ...	" " ...	6 days.
1	" " ...	Cystitis ...	Asphyxia ...	2 days.
1	" " ...	Nil ...	Gastro-enteritis ...	7 days.
1	" " ...	Nil ...	Mongolism ...	1 month.
1	" " ...	Nil ...	Spina bifida ...	24 days.
1	" " ...	Nil ...	Encephalocœle ...	2 days.
1	" " ...	Nil ...	Hæmorrhagic disease of new-born ...	7 days.
1	Forceps ...	Cystitis ...	Intracranial hæmorrhage ...	3 days.
1	" " ...	Nil ...	" " ...	1 day.
1	" " ...	Delayed 2nd stage ...	" " ...	10 mins.
1	" " ...	" " ...	" " ...	7 days.
1	" " ...	Delayed labour ...	Asphyxia ...	15 mins.
1	Cæsarean section ...	Nephritis ...	Prematurity ...	3 hours.
1	" " ...	" ...	" ...	$6\frac{1}{2}$ hours.
1	" " ...	Lateral placenta prævia ...	Melæna Neonatorum ...	3 days.
1	" " ...	Contracted pelvis ...	Cardiac failure ...	6 hours.
1	" " ...	Disproportion ...	Atresia of colon ...	2 days.
1	Scalp traction ...	Placenta prævia ...	Pulmonary atelectasis ...	6 hours.
1	Leg traction ...	Marginal placenta prævia ...	Intracranial hæmorrhage ...	12 hours.



Summary of Neo-natal Deaths.

Prematurity .. .. .	24
Intra-cranial hæmorrhage .. .. .	11
Marasmus .. .. .	3
Melæna neonatorum .. .. .	2
Pulmonary atelectasis .. .. .	2
Acholuric jaundice .. .. .	1
Cerebral laceration during birth .. .. .	1
Broncho-pneumonia .. .. .	3
Asphyxia pallida .. .. .	2
Gastro-enteritis .. .. .	1
Mongolism .. .. .	1
Cardiac failure—defective circulation .. .. .	1
Spine bifida .. .. .	1
Atresia of colon .. .. .	1
Encephalocœle .. .. .	1
Hæmorrhagic disease of the newborn .. .. .	1
	<hr/> 56 <hr/>

*Analysis of Cases of Normal and Abnormal Pregnancy, Parturition and Puerperium Treated to a Conclusion in Maternity and other Wards during the Year.*

	Discharged.	Died.	Total.
Pregnancy .. .. .	6	—	6
Pregnancy and spurious labour pains .. .. .	170	—	170
Toxæmia of pregnancy (admitted as such).. .. .	3	3	6
Ectopic gestation .. .. .	18	—	18
Abnormal condition of gravid uterus .. .. .	6	—	6
Pregnancy—			
Placenta prævia (admitted as such) .. .. .	—	—	—
Pregnancy and concomitant disease .. .. .	72	2	74
Abortion—			
Threatened .. .. .	26	—	26
Complete .. .. .	18	—	18
Incomplete .. .. .	282	1	283
Missed .. .. .	3	—	3
With pelvic infection .. .. .	10	2	12
With general peritonitis .. .. .	1	1	2
Labour—			
Normal .. .. .	1,026	1	1,027
Normal with toxæmia .. .. .	111	1	112
Normal and concomitant disease .. .. .	62	—	62
Abnormal .. .. .	138	1	139
Abnormal and toxæmia of pregnancy .. .. .	20	—	20
Abnormal and concomitant disease .. .. .	14	—	14
Multiple .. .. .	19	1	20
Puerperium—			
Normal (admitted as such).. .. .	1	—	1
Puerperal fever (admitted as such) .. .. .	1	—	1
Puerperium and concomitant disease .. .. .	6	1	7
Retained products of conception (admitted as such) .. .. .	2	—	2
Puerperal infections—			
Local pelvic infections (admitted as such) .. .. .	1	—	1
Mental disorders associated with childbirth .. .. .	1	—	1
Total .. .. .	2,017	14	2,031

Anæsthetics used in the Maternity Department.

Analgesia during labour—				
Chloroform capsules used in	..	..	..	961 cases (69 per cent.).
Gas and air (Minnitt's apparatus)	..	..	..	149 cases (11 per cent.).
Deliveries under general anæsthesia	..	..	..	112 cases (8 per cent.).
Total number of general anæsthetics administered (for delivery, version, &c.)	..	..	..	184.

Gas and air analgesia by Minnitt's apparatus has been found almost an ideal method for ordinary labour.

3. Anæsthetics.

Analysis of Anæsthetics Administered.

<i>General.</i>					Total.
Chloroform, ether or mixture	..	..	..	..	35
Ethyl chloride and ether	..	..	..	..	230
Gas and oxygen	..	..	..	..	1,788
Gas, oxygen and ether	..	..	..	..	747
Evipan	..	..	..	..	26
					———— 2,826
<i>Local.</i>					
Freezing with ethyl chloride	..	..	..	..	29
Infiltration	..	..	..	..	565
					———— 594
<i>Spinal.</i>					
Intrathecal injection	..	..	..	..	135
Total					———— 3,555

4. Department of Ophthalmology.

Total number of out-patient attendances	..	..	..	..	3,158
Refractions	..	..	..	..	502
Number of spectacles supplied	..	..	..	..	460
Operations—Total	..	..	..	..	31
<i>Minor—</i>					
Cyst of lid	..	..	..	..	8
Pigmented mole of conjunctiva	..	..	..	..	1
Entropion	..	..	..	..	1
Probing	..	..	..	..	1
Lachrymal abscess	..	..	..	..	1
<i>Major—</i>					
Tenotomy	..	..	..	..	2
Extraction of cataract	..	..	..	..	4
Enucleation	..	..	..	..	4
Discission	..	..	..	..	5
Sclerectomy	..	..	..	..	1
Evisceration	..	..	..	..	2
Iridectomy	..	..	..	..	1



## 5. Ear, Nose and Throat Department.

*Analysis of Operations.*

Removal of tonsils and adenoids in children	..	..	..	866
Removal of tonsils and adenoids, dissection	..	..	..	74
Peritonsillar abscess .. .. .	..	..	..	1
Submucous resection and dissection of tonsils	..	..	..	1
Submucous resection .. .. .	..	..	..	23
Antrostomy .. .. .	..	..	..	14
Mastoidectomy .. .. .	..	..	..	21
Turbinectomy and submucous resection	..	..	..	6
Œsophagoscopy .. .. .	..	..	..	2
Bronchoscopy .. .. .	..	..	..	4
Removal of aural polypi .. .. .	..	..	..	7
Removal of nasal polypi .. .. .	..	..	..	2
Removal of nasal polypus and submucous resection	..	..	..	1
Removal of granuloma .. .. .	..	..	..	1
Removal of papilloma .. .. .	..	..	..	1
Removal of foreign body from nose .. .. .	..	..	..	1
Removal of foreign body from ear .. .. .	..	..	..	1
Myringotomy .. .. .	..	..	..	11
				<hr/> 1,037 <hr/>

## 6. Dental Department.

Number of patients treated .. .. .	1,667
Number of general anæsthetics administered .. .. .	971
Number of extractions .. .. .	5,444
Ante-natal cases treated .. .. .	130

## 7. Physio-Therapy Department.

I. *Electrical and Massage.*

	Number.	Treatments.
In-patients .. .. .	431	8,632
Out-patients .. .. .	1,336	45,567
	<hr/>	<hr/>
Totals .. .. .	1,767	54,199
	<hr/>	<hr/>

II. *Actino-Therapy.*

	Number.	Treatments.
In-patients .. .. .	96	1,781
Out-patients .. .. .	314	14,554
	<hr/>	<hr/>
Totals .. .. .	410	16,340
	<hr/>	<hr/>
Grand Totals .. .. .	2,177	70,539
	<hr/>	<hr/>

## 8. Dispensary.

Prescriptions dispensed during the year :—

In-patients .. .. .	109,963
Out-patients .. .. .	17,590

Classification of Examinations made in the Pathological Department during 1934.

Specimens from	Pathological Examinations.														Bacteriological Examinations.																								
	Blood.										Cerebro-spinal fluid.				Fluids, exudates, &c.				Blood cultures.	Cerebro-spinal fluid.	Urine.	Fæces.	Pus.	Sputum.	Swabbings.	Films for gonococci.	Hairs for ringworm.	Vaccines.	Animal inoculations.*										
											General examination.	Lange's curve.	Wassermann reaction.*	Urine, general.	Fæces, general.	Fæces, parasitic infections.																							
	Bleeding time.	Coagulation time.	Full count.	White count.	Platelet count.	Widal reaction.	Other agglutination tests.	Fragility of red cells.	Blood grouping.	Wassermann reaction.*																													
County Hospital— North Middlesex ..																	..	3	3	413	59	9	28	28	5	151	533	158	30	52	1,578	27	6	137	43	96	1,302	64	167
West Middlesex ..											..	—	—	28	5	—	3	3	—	—	985	1	1	3	180	10	1	21	—	1	168	14	56	3	7	42	—	—	10
Central Middlesex ..	..	—	—	169	8	4	—	—	—	—	3	3	1	2	22	2	—	22	—	—	19	19	8	4	4	30	—	—	12										
Hillingdon ..	..	—	—	11	1	—	8	10	—	—	251	47	11	27	6	4	3	15	2	30	8	22	23	—	9	3	—	—	11										
Redhill ..	..	—	—	2	—	—	5	5	—	—	77	10	—	—	2	1	—	22	7	6	5	4	18	—	247	3	—	—	3										
Totals ..	..	3	3	623	73	13	44	46	5	151	1,849	219	43	84	1,788	44	10	217	52	133	1,502	123	272	867	878	223	23	3	73										

\* Wassermann reactions and animal inoculation tests are carried out by Mr. Benians in the pathological laboratory at the Prince of Wales's Hospital, Tottenham, by arrangement.





## 10. Department of Radiology.

*X-ray Investigations.*

Number of In-patients	..	..	..	..	..	..	4,178
Number of Out-patients	..	..	..	..	..	..	1,408
							<hr/>
Total	..	..	..	..	..	..	5,586
							<hr/>
Total number of <i>examinations</i>	..	..	..	..	..	..	7,847
Number of examinations of staff	..	..	..	..	..	..	291

The following are important groups where total figures are a valuable index of the work of the department :—

							Total.
" Standard chests "	..	..	..	..	..	..	1,161
Chests (taken in ward)..	..	..	..	..	..	..	220
Bronchiolography	..	..	..	..	..	..	12
Opaque meals	..	..	..	..	..	..	515
Opaque enemas	..	..	..	..	..	..	73
Cholecystography	..	..	..	..	..	..	113
Pyelography—							
(a) Intravenous	..	..	..	..	..	..	64
(b) Ascending	..	..	..	..	..	..	36
Uterine Lipiodol	..	..	..	..	..	..	10
Electrocardiograms	..	..	..	..	..	..	82

*X-Ray Therapy.*

During 1934, 119 new patients were treated in the department, the treatments they received totalling 2,606.

In addition, there were 40 patients from 1933 continuing treatment, 5 from 1932, 4 from 1931 and 3 from 1930, totalling 632 treatments, bringing the year's total to 3,238 treatments. Below is a detailed list of cases treated :—

—						Patients.	Treatments.
1934 Cases.							
Carcinoma cervix uteri, after radium	...	...	...	...	...	21	516
„ cervix uteri, no radium	...	...	...	...	...	2	31
„ corpus uteri, no radium	...	...	...	...	...	1	14
Fibromyomata uteri	...	...	...	...	...	1	—
Carcinoma ovary, after operation	...	...	...	...	...	7	150
„ vulva	...	...	...	...	...	3	78
„ breast, after operation	...	...	...	...	...	17	298
„ breast, after radium	...	...	...	...	...	1	17
„ breast, no operation	...	...	...	...	...	3	67
„ lip, after radium	...	...	...	...	...	2	44
„ tongue	...	...	...	...	...	9	249
„ glands of neck	...	...	...	...	...	4	51
„ tonsil, after radium	...	...	...	...	...	1	34
„ tonsil, no radium	...	...	...	...	...	2	26
„ pharynx	...	...	...	...	...	2	40
„ branchial, after radium	...	...	...	...	...	1	55
„ larynx	...	...	...	...	...	4	128
„ œsophagus	...	...	...	...	...	4	147
„ stomach	...	...	...	...	...	3	73
„ colon, after operation	...	...	...	...	...	2	52
„ rectum, after operation	...	...	...	...	...	4	50
„ rectum, no operation	...	...	...	...	...	1	15
„ testis	...	...	...	...	...	1	44
„ prostate	...	...	...	...	...	3	107
„ lung	...	...	...	...	...	1	1



	Patients.	Treatments.
1934 Cases (continued)		
Sarcoma ovary, after operation ... ..	1	2
„ ilium ... ..	2	52
„ isehium and pubis ... ..	1	42
„ retroperitoneal ... ..	1	27
„ ribs ... ..	1	4
„ L.I.F. ... ..	1	8
Lymphosareoma neck ... ..	1	42
Fibrosareoma thigh ... ..	1	8
Skin epithelioma with secondary glands, thigh ...	2	31
„ forehead... ..	1	36
Hodgkins disease ... ..	2	18
Non-malignant.		
Fibromyomata uteri ... ..	1	23
Fibroehondroma ... ..	1	2
Menorrhagia ... ..	1	8
Splenomegaly and jaundice ... ..	1	1
Marcomastia, post-operative ... ..	1	15
Totals ... ..	119	2,606
1933 Cases—Treatment during 1934.		
Carcinoma cervix uteri ... ..	11	243
„ ovary ... ..	1	4
„ vulva ... ..	2	50
„ breast ... ..	13	123
„ lip ... ..	1	3
„ tongue ... ..	1	2
„ pharynx ... ..	1	7
„ œsophagus ... ..	1	2
„ colon ... ..	2	10
„ sigmoid ... ..	1	3
„ testis ... ..	1	24
„ penis ... ..	1	2
Endothelioma neck ... ..	1	4
Menorrhagia ... ..	1	6
Dysmenorrhœa ... ..	1	2
Myelogenous leukæmia ... ..	1	22
Totals ... ..	40	507
1932 Cases—Treatment during 1934.		
Carcinoma cervix uteri ... ..	1	20
„ breast ... ..	4	42
Totals ... ..	5	62
1931 Cases—Treatment during 1934.		
Carcinoma breast ... ..	2	19
„ rectum ... ..	1	12
Lymphatic leukæmia ... ..	1	21
Totals ... ..	4	52
1930 Cases—Treatment during 1934.		
Carcinoma cervix uteri ... ..	1	6
„ breast ... ..	2	5
Totals ... ..	3	11

11. Radium Department,

Number of new cases seen in 1934 .. .. . 91

Condition treated	Total Cases treated.	Alive.	Died within 1 year.
I.—Carcinoma : gynæcological—			
Cervix uteri Stage I .. .. .	8	7	1
„ Stage II .. .. .	5	5	—
„ Stage III .. .. .	4	3	1
„ Stage IV .. .. .	1	1	—
Corpus uteri .. .. .	2	2	—
Ovary.. .. .	—	—	—
Vagina .. .. .	1	1	—
Vulva .. .. .	1	1	—
II.—Carcinoma : tongue and mouth—			
Tongue .. .. .	10	5	5
Floor of mouth .. .. .	3	2	1
Palate .. .. .	—	—	—
Tonsil .. .. .	1	1	—
Fauces .. .. .	—	—	—
Pharynx .. .. .	—	—	—
Œsophagus .. .. .	—	—	—
Glands of neck, secondary .. .. .	—	—	—
III.—Carcinoma : breast, &c.—			
Breast .. .. .	2	1	1
IV.—Carcinoma : rectum, &c.—			
Anus .. .. .	2	1	1
V.—Carcinoma : Larynx, &c.—			
Larynx .. .. .	—	—	—
Antrum .. .. .	—	—	—
VI.—General—			
Skin, squamous .. .. .	10	9	1
Skin, basal-celled .. .. .	8	7	1
Sarcoma .. .. .	2	2	—
Endothelioma .. .. .	—	—	—
Mixed parotid .. .. .	—	—	—
Penis .. .. .	—	—	—
Bladder .. .. .	—	—	—
Total Malignant .. .. .	60	48	12
Non-Malignant—			
Nævi .. .. .	12	12	—
Hæmangioma .. .. .	—	—	—
Granuloma .. .. .	—	—	—
Keloid .. .. .	6	6	—
Endometritis.. .. .	3	3	—
Menorrhagia .. .. .	8	8	—
Fibrosis uteri .. .. .	1	1	—
Adenomatous uterinepolypus .. .. .	—	—	—
Chronic inflammatory ulcer .. .. .	—	—	—
Wart .. .. .	1	1	—
Chronic tonsillitis .. .. .	—	—	—
Unhealed burn .. .. .	—	—	—
Lupus.. .. .	—	—	—
Total Non-malignant .. .. .	31	31	—
Grand Totals .. .. .	91	79	12









12. Out-Patient Department ,

Total number of patients seen	..	..	. ..	..	..	10,609
Total number of attendances	..	..	..	..	..	74,426
Number subsequently admitted	..	..	..	..	..	642
Number transferred from wards	..	..	..	..	..	2,061

## APPENDIX II.

ANNUAL REPORT ON THE WORK OF REDHILL COUNTY HOSPITAL  
DURING 1934, PREPARED BY THE MEDICAL SUPERINTENDENT.

## Staff.

## WHOLE-TIME MEDICAL STAFF.

*Medical Superintendent—*J. Nissen Deacon, *M.C.*, *M.B.*, *B.S.**Deputy Medical Superintendent—*E. B. Brooke, *M.A.*, *M.B.*, *B.Chir.(Cantab.)*, *M.R.C.P.*, *D.P.H.**Assistant Medical Officers—*J. H. Attwood, *M.B.*, *B.S.*, *M.R.C.S.*, *L.R.C.P.*D. B. Craig, *F.R.C.S.(Edin.)*.E. ap I. Rosser, *M.R.C.S.*, *L.R.C.P.* (Appointed Jan. 1935).

## VISITING MEDICAL STAFF.

*Surgeon—*R. Trevor Jones, *B.Sc.*, *M.B.*, *B.S.*, *F.R.C.S.(Eng.)*.*Radiologist—*G. Simon, *M.B.*, *B.Chir.(Cantab.)*, *D.M.R.E.(Cantab.)*.*Dental Surgeon—*J. A. Hudson, *L.D.S.*, *R.C.S.(Eng.)*.

## NURSING—(92).

Matron—Miss E. R. Wheeldon.

Administrative Sisters	..	..	2	Nurses and Probationers (44)	..	75
Departmental Sisters	..	..	3	Massage Sister	..	1
Ward and Night Sisters	..	..	8	Masseuses	..	2

## OTHER STAFF.

*(Non-Resident.)*

Chaplain	..	..	..	..	..	Rev. C. E. de R. Copinger.
Steward	..	..	..	..	..	Mr. J. Fielding, <i>A.R.S.I.</i>
Pharmacist	..	..	..	..	..	Miss W. N. Knight, <i>M.P.S.</i>
Chief Assistant Dispenser and Biochemist	..	..	..	..	..	Miss E. Johnson, <i>Ph.C.</i> , <i>M.P.S.</i>
Radiographer	..	..	..	..	..	Miss B. V. Poole, <i>M.S.R.</i>
Lady Almoner	..	..	..	..	..	Mrs. F. G. Owen, <i>A.I.H.A.</i>

On his appointment to the post of Medical Superintendent at Hillingdon County Hospital, Hillingdon, near Uxbridge, Dr. W. A. Steel, Deputy Medical Superintendent, resigned and on the 15th May left to take up his new duties.

Dr. Steel was appointed Deputy Medical Superintendent in January, 1928, and held the post for six years. To his loyal co-operation and the professional skill which he displayed throughout this period the success and good reputation of this hospital are in no small part due.

The vacancy created by Dr. Steel's resignation was filled by the promotion of Dr. E. B. Brooke, Resident Assistant Medical Officer, who commenced duty as Deputy Medical Superintendent on the 16th May. Dr. Brooke acts also as Physician to the hospital.

The surgical duties, hitherto performed by Dr. Steel, devolved on Mr. Craig, who has charge of the surgical wards and shares with Mr. Trevor Jones, Visiting Surgeon, the major surgery of a general nature. He is also in charge of the Maternity Department, where he is assisted by Dr. Rosser, recently appointed Resident Assistant Medical Officer and formerly Senior Resident at the Jessop Hospital for Women.

Ear, Nose and Throat Surgery is in the hands of the Medical Superintendent.

Dr. Attwood has charge of the Children's Ward and administers the majority of the general anæsthetics. He is an unusually skilled anæsthetist and a great asset to the hospital.



Beds.

The existing block of buildings was planned to contain 175 beds and cots and 18 maternity cradles. In each of the four years, 1928 to 1931, one or more small additions to the complement were made. Since the latter part of 1931 the complement at 215 has remained unchanged. The beds, cots and cradles are allotted as follows :—

Male—medical	..	..	..	..	..	..	32	
„ —surgical	..	..	..	..	..	..	32	
„ —ear, nose and throat			..	..	..	..	7	
							—	71
Female—medical	..	..	..	..	..	..	29	
„ —surgical	..	..	..	..	..	..	29	
„ —ear, nose and throat			..	..	..	..	5	
							—	63
Maternity beds	..	..	..	..	..	..	21	
„ cradles	..	..	..	..	..	..	20	
„ isolation beds (3), cradles (3)					..	..	6	
							—	47
Children under 7—general			..	..	..	..	26	
„ —ear, nose and throat					..	..	6	
							—	32
Sick nurses	..	..	..	..	..	..		2
								—
Total	..	..	..					215
								—

Nurses Training School.

The hospital was opened in December, 1927. In April, 1929, it was approved by the General Nursing Council as a complete training school for nurses. In May, 1931, the Central Midwives Board approved the hospital as a training school for midwives and the sister-in-charge of the maternity department as a recognised teacher of midwifery.

After a trial period of three months, probationer nurses proceed to a three-years' course of training. On completion of the latter they are required to sit for the County Nurses' examination, and for the Final State examination for admission to the general part of the State Register of Nurses. To the nurse who most distinguishes herself in the County examination, a County gold medal is awarded and County silver medals to the nurses who are second and third in order of merit. To those nurses who satisfy the examiners County certificates of training are granted. Based on the results of the County examination, nurses who so desire are accepted for training for the certificate in midwifery granted by the Central Midwives Board.

ACADEMIC SUCCESSES DURING THE YEAR.

	Passed.	Failed.
County Nurses Examination	6*	2
State Examination—Final	8	2
Certificate of Central Midwives Board	8	5

Social Service Department.

The Lady Almoner is vested by the County Council with the powers of a relieving officer. The investigations made in this connection enable her to render advice and arrange help, apart from hospital treatment, for those who need it. Her presence here makes it unnecessary to refer to area relieving officers, or to admit on emergency orders, many of those who apply direct to the hospital for in-patient treatment. Approximately one-third of the number of patients treated to a conclusion was admitted to hospital on orders issued by her.

In connection with women seeking admission to the maternity wards her services are of particular value. Such women, given that they are not in labour, are referred direct to her. In 1934 the number of new cases so referred and interviewed was 688. Women who, for one reason or another, cannot be accepted for admission are either advised how to proceed or have other arrangements made for them.

The provisional assessment and collection of payments from persons attending the various out-patient departments is another duty performed by the Almoner. Out-patient attendances in 1934 number 23,796.

\* Miss L. J. Graves passed with honours and was awarded a County Silver Medal; two others passed with distinction in practical nursing.

### Hospital Library Service.

Owing to the resignation of Mrs. Lumsden, chief honorary librarian, and to the change of residence made in April by her assistant, Mrs. Graham, the hospital library service became somewhat irregular. Finding it impossible to make a regular weekly visit from her new home in Hampshire, Mrs. Graham resigned in June. Our thanks are due to these two ladies for their efficient organisation and management of our library.

In July, Mrs. J. Tate, of Stanmore, and Miss Dumbleton, of Stanmore, having kindly offered their services, the British Red Cross Society appointed them chief honorary librarian and assistant librarian respectively. Assisted by Miss Moore and Miss Tate, they have provided a regular and very efficient service and one greatly appreciated by our patients.

### Work of the Hospital.

As in previous years this is set out in the form of statistical tables and analyses which deal in detail with the work of the hospital during the year.

The number treated to a conclusion in 1934 is a record for the hospital. For the fourth year in succession approximately 40 per cent. of those treated were children under 16.

The average daily number of beds unavailable by reason of repairs, infection and occupation by sick staff is 8·8, an increase of 3·4. This increase is due to the occurrence of two cases of puerperal sepsis, which necessitated the closure of the maternity wards during the month of January with a loss of 676 bed-days, and to the closure of wards for re-decoration during five weeks in September and October, when a further 1,686 bed-days were lost.

The average daily number of occupied beds (185) is decreased by 7. The average daily percentage of available beds occupied at 89·7 shows a decrease of 2. When considering this last number, one must bear in mind the many specific uses to which our small total number of beds is put. Beds are allotted to male and female medical and surgical cases, maternity cases, male and female ear, nose and throat cases and to cases of sick children, *i.e.*, to 8 groups, each in a separate ward.

The average daily percentage of patients on the dangerously ill list is 14·3. This is a very high percentage and shows an increase of 2·1 on the 1933 figure.

The average length of stay per patient is 16·7 days, a decrease of 1·9 days. At 5·9 per cent. the death-rate shows a very slight increase.

### SPECIAL DEPARTMENTS.

The number of special departments remains unchanged. To the work of a few, special attention is drawn here below.

#### *Operations and Anæsthetics.*

The number of major operations is 928, a decrease of 34. There were 1,517 operations performed in the theatres. The operative mortality rates of major and minor operations at 4·2 per cent. and 0·24 per cent. show increases of 0·9 and 0·14 respectively. Of 2,205 general anæsthetics administered, 438 were given for dental purposes.

#### *Maternity.*

Owing to the closure of the department for four weeks in January, the number of confinements fell and at 460 compares with 474 in 1933.

The number of maternity beds being insufficient to cope with the demands made upon them, preferential admission is given to primiparæ and to those whose confinements are likely to be abnormal. Thus the percentage of primiparæ delivered remains high at 61 and approximately one woman in every four delivered had some abnormality during pregnancy and/or labour.

The maternal morbidity rate per 1,000 women delivered has fallen and at 43·4 compares with 58·9 in 1933 and 73·1 in 1932.

The average length of the lying-in period at 14·3 days shows no change.

Although the stillbirth rate has risen from 3·9 to 4·5 per 100 births, at the latter figure it still remains low.

#### *Ear, Nose and Throat.*

Owing to a planned curtailment, the number of in-patients primarily treated for diseases and conditions of the ear, nose and throat has fallen and at 559 compares with 603 in 1933.

In April, 1929, arrangements were made with the Hendon Education Committee for the operation for removal of tonsils and adenoids to be performed at this hospital on a certain proportion of children considered by the school medical officers to be in need of such. During the past year 109 children were admitted under this arrangement. Children admitted at 5 p.m. on Monday for operation on Tuesday are discharged at 10 a.m. on Wednesday and those admitted at 5 p.m. on Wednesday for operation on Thursday are discharged at 10 a.m. on Friday.

Out-patients attend daily (Sundays included) and on Tuesday and Friday afternoon an out-patient clinic is held by the Aural Surgeon. Again there has occurred a large increase in the number of out-patients, their attendances at 5,466 having more than doubled.

Ear, nose and throat operations on in-patients and out-patients number 609.



*Massage, Electro-therapeutic and Light.*

There has been an increased demand for treatments in these departments.

Massage treatments at 10,040 and electrical and light treatments at 3,642 compare with 8,441 and 2,884 treatments respectively in 1933. The work of this department is now twice as great as it was in 1932.

*Genito-urinary Clinic.*

During the year a Genito-urinary clinic was instituted. It is held weekly by the visiting surgeon at 3 p.m. on Thursday. Both in-patients and out-patients attend.

*Out-Patients.*

The department has a full-time nursing staff of a sister, staff nurse and three assistant nurses for ambulance, receiving and casualty duties.

In the various out-patient departments are seen patients discharged from the wards, casualties, persons sent for consultation, special investigation and/or treatment, and women attending the ante-natal clinics. During the year 5,840 out-patients were treated. They made 23,796 attendances. Details of the out-patient work appear later in this report.

CO-OPERATION WITH GENERAL MEDICAL PRACTITIONERS.

During the year 2,126 letters were sent by the Medical Superintendent to medical practitioners on the discharge of their patients. These letters contained particulars of any investigations made and operations performed and the treatment given and advised. The letters of thanks received from practitioners show how much this service is appreciated.

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DAYS AND TIMES OF SPECIALISTS ATTENDANCES AND OUT-PATIENT CLINICS.

Monday	..	..	2 p.m.	..	Radiologist attends.
			2 p.m.	..	Dental Surgeon attends.
Tuesday	..	..	10 a.m.	..	Ante-natal Clinic.
			2 p.m.	..	Ear, Nose and Throat Clinic.
			2 p.m.	..	Medical Out-patient Consultations.
Wednesday	..	..	2 p.m.	..	Radiologist attends.
			2 p.m.	..	Orthopædic and Fracture Clinic.
			2 p.m.	..	Varicose Vein Clinic.
Thursday	..	..	10 a.m.	..	Ante-natal Clinic.
			2 p.m.	..	Dental Surgeon attends.
			3 p.m.	..	Genito-urinary Clinic.
Friday	..	..	2 p.m.	..	Ear, Nose and Throat Clinic.

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## STATISTICAL TABLES AND ANALYSES.

Remaining in hospital, 1st January, 1934	..	..	190	
Admitted	..	..	3,517	
Born in hospital	..	..	437	
			<hr/>	4,144
Discharged	..	..	3,738	
Died	..	..	234	
Patients treated to a conclusion during the year	..			3,972
			<hr/>	
Remaining in hospital on 31st December, 1934	..			172
			<hr/>	

## CLASSIFICATION OF PATIENTS TREATED TO A CONCLUSION.

Male infants under 3	..	..	..	..	..	441	
Boys, 3-16	..	..	..	..	..	456	
Men	..	..	..	..	..	890	
						<hr/>	1,787
Female infants under 3	..	..	..	..	..	331	
Girls, 3-16	..	..	..	..	..	387	
Women	..	..	..	..	..	1,467	
						<hr/>	2,185
						<hr/>	
Total..	..	..	..	..	..		3,972
							<hr/>

Children under 16 constituted 41 per cent. of all patients treated.

The number of *patients treated to a conclusion* during the year is the subject of the tables which follow.

## I—TABLE SHOWING HOW THE 3,972 PATIENTS TREATED TO A CONCLUSION DURING THE YEAR WERE ORIGINALLY ADMITTED.

1. By Lady Almoner's order	..	..	..	..	..	1,351	
2. By Relieving Officer's order	..	..	..	..	..	721	
By Medical Superintendent :—							
3. Births	..	..	..	..	..	443	
4. Police cases (other than accidents)	..	..	..	..	..	18	
5. Accidents	..	..	..	..	..	360	
6. Maternity cases (emergency)	..	..	..	..	..	32	
7. Other urgent cases	..	..	..	..	..	895	
8. Transfer from institution or home—M.C.C.	..	..	..	..	..	40	
9. Transfer from hospital—M.C.C.	..	..	..	..	..	—	
10. Transfer from hospital or institution—other authority	..					1	
11. By agreement with another authority	..	..	..	..	..	111	
						<hr/>	
Total	..	..	..	..	..	3,972	
						<hr/>	

Of the above patients, 47·8 per cent. were admitted by the Medical Superintendent.

Admitted twice during the year for the same disability	..	103
Admitted thrice during the year for the same disability	..	21



II.—TABLE SHOWING THE DISTRICTS TO WHICH THE 3,972 PATIENTS BELONGED.

Borough of Hendon .. .. .	1,867
Urban District of Harrow .. .. .	1,241
"    "    "    Wembley.. .. .	807
Other districts of Middlesex .. .. .	57
Total .. .. .	3,972

Note.—The allotment of an accident case to any one of the preceding districts is governed by the following rules :—

- (1) A person admitted, who is normally resident within the County, becomes a case for the district of residence, irrespective of the district in which the accident occurred.
- (2) A person admitted, not being normally resident within the County, becomes a case for the district in which the accident actually occurred.
- (3) A person admitted from and normally resident outside the County area becomes a case for the Borough of Hendon, being the district in which the hospital is situate.

III.—TABLE SHOWING THE RESULTS OF TREATMENT OR THE TERMINATION, TOGETHER WITH ANALYSES OF DEATHS IN AGE AND OTHER GROUPS.

Cured .. .. .	2,771 = 69·7 per cent.
Relieved .. .. .	897 = 22·6    "
Unrelieved .. .. .	70 = 1·8     "
Died .. .. .	234 = 5·9     "

*Analysis of Deaths in Age Groups.*

Ages.	Male.	Female.	Totals.
Under 1 .. .. .	16	14	30
1-2 .. .. .	5	2	7
2-5 .. .. .	8	3	11
5-15 .. .. .	4	9	13
15-25 .. .. .	9	3	12
25-35 .. .. .	16	13	29
35-45 .. .. .	16	13	29
45-55 .. .. .	24	9	33
55-65 .. .. .	21	5	26
65-75 .. .. .	20	12	32
Over 75 .. .. .	9	3	12
Totals.. .. .	148	86	234

	Treated.	Percent- age of total.	Died.	Case Mortality per cent.
Medical cases .. .. .	907	23	116	12·8
Surgical and obstetric cases .. .. .	3,065	77	118	3·9
				Percentage of total.
*Deaths within 12 hours of admission .. .. .			36	= 15
*Deaths 12 to 24 hours after admission .. .. .			26	= 11
Deaths 24 to 48 hours after admission .. .. .			25	= 11
Deaths 48 to 72 hours after admission .. .. .			14	= 6
All other deaths .. .. .			133	= 57
Total deaths .. .. .			234	= 100
*Injuries ... .. .			14	
Terminal stage—acute disease ... .. .			19	
Terminal stage—chronic disease ... .. .			19	
Neo-natal deaths ... .. .			10	
Total deaths within 24 hours ... .. .			62	

For the causes of death, see Table VII.

## IV.—TABLE SHOWING THE BEHAVIOUR OF PATIENTS AND THEIR MANNER OF DISCHARGE.

Patients whose behaviour was normal	..	..	..	..	3,938
Patients whose behaviour was abnormal	..	..	..	..	34*
Total	..	..	..	..	3,972
*Troublesome	...	...	...	...	13
Mentally deranged	...	...	...	...	11
Suicidal	...	...	...	...	10
					34

*Discharge.*

In the normal manner or by death	..	..	..	..	3,870
At own request, with Medical Superintendent's approval				..	66
At own request, against Medical Superintendent's advice				..	36
Ejected for misconduct	..	..	..	..	—
Total	..	..	..	..	3,972

## V.—TABLE SHOWING WHITHER THE 3,972 PATIENTS WERE DISCHARGED.

1. To own, relative's or friend's home	..	..	..	..	2,457
2. To institution or children's home—M.C.C.	..	..	..	..	167
3. To out-patients' department	..	..	..	..	926
4. To convalescent home	..	..	..	..	139
5. To general hospital—M.C.C.	..	..	..	..	21
6. To hospital or institution—other authority	..	..	..	..	8
7. To acute infectious disease hospital	..	..	..	..	11
8. To mental hospital	..	..	..	..	—
9. To sanatorium	..	..	..	..	5
10. To voluntary hospital	..	..	..	..	4
11. Died	..	..	..	..	234
Total	..	..	..	..	3,972

## VI.—AVERAGES FOR THE YEAR.

Beds—average daily complement	..	..	..	..	215
Beds—average daily number available	..	..	..	..	206·2
Beds—average daily number occupied	..	..	..	..	185
Average daily percentage of available beds occupied	..	..	..	..	89·7
Patients per occupied bed—average number per annum	..	..	..	..	21·5
Nursing staff—average daily complement	..	..	..	..	89·5†
Occupied beds per nurse—average number	..	..	..	..	2·1†
Admissions—average daily number	..	..	..	..	10·8
Dangerously ill—average daily percentage	..	..	..	..	14·3
Stay—average length in days per patient	..	..	..	..	16·7
Maximum number of beds occupied = 207 on 23rd July and 20th September.					
Minimum number of beds occupied = 133 on 30th September.					

† Includes Matron, 14 sisters and nurses not employed in the wards and 3 masseuses.



VII.—CLASSIFICATION OF THE DISEASES AND CONDITIONS FOR WHICH THE 3,972 DISCHARGED PATIENTS WERE PRIMARILY TREATED DURING 1934.

Classified according to the Nomenclature of Diseases (Sixth Edition, 1931), drawn up by the Royal College of Physicians of London.

Disease or Condition.	Medical.			Surgical and Obstetric.			Totals.
	Relieved.	Unrelieved.	Died.	Relieved.	Unrelieved.	Died.	
Healthy—							
No abnormality detected .. ..	5	—	—	—	—	—	5
Breast-fed infant with mother .. ..	26	—	—	—	—	—	26
Births .. .. .	—	—	—	430	—	13	443
Diseases due to infection—							
Erysipelas .. .. .	30	—	1	—	—	—	31
Gonorrhœa .. .. .	3	4	—	—	—	—	7
Influenza and its complications .. ..	29	—	9	—	—	—	38
Measles—morbilli and rubella .. ..	13	—	2	—	—	—	15
Mumps, pertussis, varicella .. ..	4	—	—	—	—	—	4
Rheumatism—acute and sub-acute .. ..	40	—	—	—	—	—	40
Rheumatic chorea .. .. .	9	—	—	—	—	—	9
Syphilis—primary and secondary .. ..	—	—	—	—	—	—	—
Tuberculosis—pulmonary .. .. .	13	3	2	—	—	—	18
Tuberculosis—non-pulmonary .. ..	1	—	5	5	4	—	15
Miscellaneous notifiable .. .. .	5	3	1	—	—	—	9
Miscellaneous non-notifiable .. ..	1	1	2	—	—	—	4
Infestations by metazoan parasites .. ..	5	—	—	—	—	—	5
Diseases of the nervous system—							
Of vascular origin .. .. .	1	5	4	—	—	—	10
Mental diseases .. .. .	17	2	—	—	—	—	19
Miscellaneous .. .. .	17	4	1	—	—	—	22
Diseases of the eye .. .. .	—	—	—	4	—	—	4
Diseases of the ear .. .. .	—	—	—	153	—	2	155
Diseases of the nose and sinuses .. ..	—	—	—	23	—	1	24
Diseases of the circulatory system—							
Rheumatic carditis—chronic .. ..	19	—	4	—	—	—	23
Myocardial degeneration, etc. .. ..	9	5	4	—	—	—	18
Arteriosclerosis, hyperpiesis .. ..	18	4	4	—	—	—	26
Of the veins .. .. .	7	—	1	—	—	—	8
Miscellaneous .. .. .	5	3	9	—	—	—	17
Diseases of the blood and spleen .. ..	10	—	—	—	—	—	10
Diseases of the lymphatic system .. ..	6	—	—	46	—	—	52
Diseases of the endocrine glands .. ..	3	—	1	—	—	—	4
Diseases of the breast .. .. .	—	—	—	18	—	—	18
Diseases of the respiratory system—							
Bronchitis—acute .. .. .	28	1	—	—	—	—	29
Bronchitis—chronic .. .. .	12	1	2	—	—	—	15
Asthma .. .. .	8	—	2	—	—	—	10
Pneumonia—primary .. .. .	70	—	12	—	—	—	82
Broncho-pneumonia .. .. .	25	—	12	—	—	—	37
Pleurisy, empyema .. .. .	15	—	—	10	—	1	26
Miscellaneous .. .. .	3	—	—	—	—	—	3
Diseases of the teeth and gums .. ..	—	—	—	37	—	1	38
Diseases of the digestive system—							
Tonsillitis .. .. .	—	—	—	109	—	2	111
Enlarged tonsils and/or adenoids .. ..	—	—	—	269	—	—	269
Peptic ulcers .. .. .	23	—	3	21	—	6	53
Dyspepsia of infants .. .. .	19	—	6	—	—	—	25

Disease or Condition.	Medical.			Surgical and Obstetric.			Totals.
	Relieved.	Unrelieved.	Died.	Relieved.	Unrelieved.	Died.	
Diseases of the digestive system— <i>contd.</i>							
Of stomach and duodenum—other ..	3	—	—	—	—	—	3
Appendicitis .. .. .	9	—	—	186	—	5	200
Visceroptosis, constipation, stasis ..	59	1	—	—	—	—	60
Herniæ .. .. .	—	—	—	35	1	8	44
Of intestine, rectum, anus—other ..	11	—	5	20	—	6	42
Of liver and gall-bladder .. ..	6	1	4	20	—	1	32
Of peritoneum .. .. .	—	—	—	5	—	5	10
Miscellaneous .. .. .	3	—	2	—	—	—	5
Diseases due to disorders of nutrition or of metabolism .. .. .	21	2	4	—	—	—	27
Diseases of the generative system—							
Of the male organs .. .. .	—	—	—	90	—	2	92
Of the female organs .. .. .	—	—	—	53	1	—	54
Pregnancy, parturition and puerperium—							
Normal and abnormal conditions ..	—	—	—	673	—	10	683
*Diseases of the organs of locomotion—							
Fibrositis group .. .. .	14	—	—	—	—	—	14
Arthritis deformans .. .. .	8	2	—	—	—	—	10
Pyogenic—acute and chronic .. ..	—	—	—	14	—	1	15
Miscellaneous .. .. .	—	—	—	11	—	—	11
Diseases of the areolar tissue .. ..	—	—	—	40	—	—	40
Diseases of the skin .. .. .	30	—	2	—	—	—	32
Diseases of the urinary organs—							
Nephritis .. .. .	17	2	9	—	—	—	28
Pyelitis .. .. .	25	—	—	—	—	—	25
Miscellaneous .. .. .	6	1	1	19	—	—	27
Injuries—							
Superficial .. .. .	—	—	—	28	—	—	28
Deep, internal and foreign bodies ..	—	—	—	46	—	2	48
†Shock or other general injury .. ..	—	—	—	30	—	—	30
†Cerebral concussion .. .. .	—	—	—	91	—	—	91
†Cerebral contusion .. .. .	—	—	—	5	—	3	8
Burns and scalds .. .. .	—	—	—	31	—	4	35
Wounds—clean and septic .. .. .	—	—	—	68	1	3	72
Septic conditions of the hand .. ..	—	—	—	22	—	1	23
Fractures and dislocations .. .. .	—	—	—	249	3	19	271
Miscellaneous .. .. .	—	—	—	8	—	1	9
‡Tumours, benign—							
Of the generative system .. .. .	—	—	—	11	—	2	13
Of other organs and structures .. ..	—	—	—	4	—	—	4
Tumours, malignant—							
Of the digestive system .. .. .	—	—	—	3	5	13	21
Of the generative system .. .. .	—	—	—	3	3	1	7
Of the urinary organs .. .. .	—	—	—	—	—	1	1
Of other organs and structures .. ..	—	—	—	—	6	2	8
Tumours—intra-cranial .. .. .	—	—	—	—	—	2	2
Cysts .. .. .	—	—	—	5	—	—	5
Malformations—congenital .. .. .	5	—	—	2	—	—	7
Poisonings .. .. .	10	1	1	—	—	—	12
For special investigation/treatment, etc.	19	—	1	26	—	—	46
Totals .. .. .	745	46	116	2,923	24	118	3,972

\* 1918 group-title retained. That for 1931 is : Diseases of bones, joints, muscles, fasciæ and bursæ.

† The majority of cases had additional and superficial injuries.

‡ 1918 classification of tumours retained.



*Diseases and Conditions treated to a Conclusion.*

(Grouped in order of frequency.)

	Treated.	Died.
Pregnancy, parturition and puerperium ..	683	10
Injuries—general and local .. ..	615	33
Diseases of the ear, nose and throat ..	559	5
Diseases of the digestive system .. ..	474	51
Births .. .. .	443	13
Diseases of the respiratory system .. ..	202	29
Diseases due to infection .. .. .	190	22
Diseases of generative organs .. ..	146	2
Diseases of circulatory system .. ..	92	22
Diseases of urinary organs .. .. .	80	10
Diseases of areolar tissue and skin .. ..	72	2
Tumours .. .. .	56	21
Diseases of the lymphatic system .. ..	52	—
Diseases of the nervous system .. ..	51	5
Diseases of organs of locomotion .. ..	50	1
Diseases of remaining groups .. ..	207	8
Total treated ..		3,972 of whom 234 died.

The first five groups of cases together constitute 70 per cent. of the total number treated to a conclusion. Whilst the numbers of those treated for injuries and for diseases of the digestive system have risen, the planned curtailment of admissions for the removal of tonsils and adenoids has resulted in a decrease in the number treated for diseases of the ear, nose and throat and the consequent release of a small number of beds for the accommodation of more urgent cases. Of 155 persons treated for aural diseases, 95 had mastoiditis. The total number of medical cases treated to a conclusion has increased. Their proportion has increased also and at 23 per cent. compares with 21 per cent. in 1933. This increase is due largely to an increase in the number treated for respiratory diseases and especially for primary pneumonia, which has the low case mortality rate of 14·6 per cent.

The total medical case mortality rate has fallen slightly and at 12·8 per cent. compares with 13·2 per cent. in 1933.

Diseases and conditions of the first and fifth groups are dealt with in the Maternity Section of this report.

The increase in the fourth group is largely due to the greater number of appendicitis cases treated. The appendicitis operative mortality rate has fallen from 3·9 to 3 per cent.

Of the injuries 272 were sustained in street accidents, an increase of 18 on the 1933 figure. The number of persons treated for cerebral trauma (cerebral concussion and cerebral contusion) at 138 compares with 97 in 1933 and shows a marked increase. Fractures and dislocations, which together constitute 44 per cent. of the injuries treated, are analysed on the following page.

Analysis of Fractures and Dislocations treated to a conclusion during the Year, their Nature, together with the Results of their In-patient and Out-patient Treatment secured before or at 31st December.

	Nature.		Result.					Totals.
	Simple.	Compound.	Very Good.	Good.	Medium.	Poor.	Died.	
Skull .. .. .	7	1	6	2	—	—	—	8
Skull with concussion .. .. .	7	3	6	3	1	—	—	10
Skull with cerebral contusion .. .. .	8	21	16	3	—	—	10	29
Vertebræ .. .. .	2	—	1	1	—	—	—	2
Ribs .. .. .	8	—	7	—	—	—	1	8
Clavicle .. .. .	12	—	9	3	—	—	—	12
Scapula .. .. .	—	—	—	—	—	—	—	—
Humerus .. .. .	12	2	10	2	1	1	—	14
Radius or ulna or both .. .. .	10	2	9	2	1	—	—	12
Carpus, metacarpus or phalanges .. .. .	—	7	2	—	5	—	—	7
Pelvis .. .. .	7	—	7	—	—	—	—	7
Femur, neck or great trochanter .. .. .	10	—	3	3	—	3	1	10
Femur, shaft or lower end .. .. .	16	—	13	1	—	2	—	16
Patella .. .. .	6	—	4	2	—	—	—	6
Tibia .. .. .	19	—	19	—	—	—	—	19
Fibula .. .. .	7	—	6	1	—	—	—	7
Tibia and fibula, simple .. .. .	32	—	30	1	—	1	—	32
Tibia and fibula, compound .. .. .	—	5	4	—	—	—	1	5
Tarsus, metatarsus or phalanges .. .. .	2	—	2	—	—	—	—	2
*Multiple bony injuries, simple .. .. .	22	—	16	2	1	1	2	22
*†Multiple bony injuries, compound .. .. .	—	15	6	1	2	2	4	15
Fracture-dislocations, various .. .. .	9	2	10	1	—	—	—	11
Separated epiphyses .. .. .	3	—	3	—	—	—	—	3
Dislocations, various .. .. .	6	—	5	1	—	—	—	6
Pathological, malunited, &c. .. .. .	7	1	2	2	3	1	—	8
Totals.. .. .	212	59	196	31	14	11	19	271

\* Multiple fractures of the vertebral column, hand and foot and cases of fractured ribs, tibia with fibula and radius with ulna are not included in this group unless associated with one or more fractures or dislocations elsewhere. Multiple fractures of the bones of the skull, face and nose are not classified as multiple.  
† One or more injuries being compound, not necessarily all.

21 per cent. of the fracture and fracture-dislocation cases were of the compound variety.

Men .. .. .	133, of whom	13 died.
Women .. .. .	60, of whom	4 died.
Children under 16—male .. .. .	54, of whom	1 died.
Children under 16—female .. .. .	24, of whom	1 died.
Total .. .. .	271, of whom	19 died.

Special Methods of Treatment applied under General Anæsthesia to the above Cases.

Manipulation .. .. .	40
Manipulation under fluorescent screen .. .. .	13
Manipulation and fixation by plaster of Paris .. .. .	49
Manipulation and fixation by plaster of Paris under screen .. .. .	26
Transfixion-extension by pin or wire .. .. .	45
Open operation followed by application of plaster of Paris .. .. .	15
Amputation for compound fracture of phalanx .. .. .	5

In addition to the above, there were 112 applications of plaster of Paris without anæsthesia. Apart from the 5 patients who had amputations of finger for compound fractures of phalanges, no other fracture case had amputation.  
In many cases more than one special method of treatment was applied to the individual. With few exceptions the plasters were applied on the Hawley Table.



Results of Treatment.

	1934.	1933.	1932.
Very good .. ..	196 = 72 per cent.	182 = 71 per cent.	172 = 65 per cent.
Good .. ..	31 = 12 „	28 = 11 „	39 = 15 „
Medium or poor ..	25 = 9 „	27 = 11 „	32 = 12 „
Died .. ..	19 = 7 „	19 = 7 „	22 = 8 „
	<hr/>	<hr/>	<hr/>
Totals .. ..	271 =100 „	256 =100 „	265 =100 „
	<hr/>	<hr/>	<hr/>

N.B.—The result of treatment is classified as “very good” only when the three following conditions are fulfilled :—

- 1. Little or no depreciation of function.
- 2. Anatomical alignment of fragments.
- 3. Shortening, if present, not exceeding half an inch.

The result of a fracture successfully treated by amputation is classified as medium.

Of 25 patients whose results were medium or poor, 5 had amputation ; 8 were transferred to the Infirmary before completion of treatment (2 on account of age and debility, 6 on account of mental state) ; 2 were transferred to other general hospitals ; 2 were self-discharged ; 1 lives out of the district and her end-result cannot be ascertained ; 4 had pathological fracture ; and the remaining 3 had respectively fracture of lower end of humerus with myositis ossificans, compound fracture of radius and ulna with gas-gangrene, multiple compound fractures with cerebral contusion.

Cause of death—

Cerebral contusion or laceration .. ..	14
Shock .. ..	2
Cerebral concussion and tabes .. ..	1
Arteriosclerosis and broncho-pneumonia (man aged 59) ..	1
Pneumonia (man aged 51) .. ..	1
	<hr/>
Total fracture deaths .. ..	19
	<hr/>

The average length of stay of the 271 fracture and dislocation cases analysed above was 31 days, a decrease of 14 days. The average daily number of beds and cots occupied by these cases was 26, i.e., approximately 16 per cent. of the 166 beds and cots available.

During the year there were treated to a conclusion, and entirely as out-patients, 122 cases of fracture and dislocation. These are not included in the above analysis and are additional. The total number of fracture and dislocation cases treated to a conclusion is therefore 393. The majority were sustained in street accidents.

Their number and severity are accounted for by the fact that within the area served by this hospital are many arterial roads along which cars can, and do, travel at speeds greater than those possible on roads within more congested areas. Consequently, when a pedestrian or a person travelling on a cycle or by car is struck, it is, as often as not, with considerable violence. Thus it is that such a large proportion sustains multiple fractures (approximately 1 in 7 of those treated as in-patients) and 1 in-patient case in 5 is of the compound variety.

Attendances at the weekly orthopædic and fracture clinic at 1,687 compare with 2,214 made in 1933.

## VIII.—THE WORK OF THE SPECIAL DEPARTMENTS.

1. Surgical	..	..	..	..	Major operations	..	..	928	
					Minor operations	..	..	2,120	
									3,048
2. Anæsthetics	..	..	..	..	General	..	..	2,205	
					Local	..	..	308	
					Spinal	..	..	12	
									2,525
3. Dental	..	..	..	..	Patients	..	..	355	
					Attendances for treatment	..		1,129	
4. Radiological	..	..	..	..	Patients investigated	..	..	1,715	
					Investigations	..	..	2,498	
5. Massage	..	..	..	..	Patients	..	..	807	
					Treatments	..	..	10,040	
6. Electro-Therapeutic and Light				..	Patients	..	..	276	
					Treatments	..	..	3,642	
7. Maternity	..	..	..	..	Women examined at ante-natal clinic	..	..	657	
					Attendances at ante-natal clinic			2,723	
					Births	..	..	464	
					Obstetric operations	..	..	136*	
					Attendances at post-natal clinic			261	
8. Pathological	..	..	..	..	Investigations	..	..	2,148	
9. Ear, Nose and Throat			..	..	Operations	..	..	609*	
10. Therapeutic, Diagnostic, Prophylactic.					Special procedures	..	..	889	
11. Casualty and Out-Patients	..	..	..	..	†Patients	..	..	5,840	
					Attendances	..	..	23,796	
					Operations	..	..	851*	
12. Nurses' Sick Room	..	..	..	..	Admissions	..	..	51	

*Note.*—Included in the above figures are those of the minor operations, anæsthetics, special treatments and investigations performed on, given to or made on patients in the casualty, various out-patient departments and nurses' sick room.

\* These operations are included in the numbers of major and minor operations and are not additional.

† Ante-natal and post-natal patients, attendances and operations included.



Department of Surgery.  
Analysis of Operations performed during the Year.

	In-Patients.		Casualty and Out-Patients.		Nurses.		Totals.
	Major.	Minor.	Major.	Minor.	Major.	Minor.	
General—							
On skin and superficial structures ..	11	309	—	512	—	7	839
On arteries, veins and lymphatics ..	—	47	—	36	—	—	83
On nerves .. .. .	—	3	—	—	—	—	3
On bones and joints .. .. .	78	224	—	135	—	—	437
On muscles, tendons, bursæ and fasciæ	13	1	—	3	—	—	17
Amputations .. .. .	3	3	—	—	—	—	6
On skull, brain and spine .. .. .	1	—	—	—	—	—	1
On face .. .. .	—	4	—	9	—	—	13
On eye .. .. .	—	1	—	41	—	—	42
On mouth, pharynx and œsophagus..	—	6	—	—	—	—	6
On thyroid, accessory glands and neck .. .. .	3	1	—	—	—	—	4
On breast .. .. .	3	18	—	—	—	—	21
On thorax and contents .. .. .	24	7	—	—	—	—	31
On abdominal wall and cavity .. .. .	58	—	—	—	—	—	58
On stomach and duodenum .. .. .	31	—	—	—	—	—	31
On intestine, rectum and anus .. .. .	218	19	—	2	1	—	240
On liver, gall-bladder, pancreas and spleen .. .. .	5	—	—	—	—	—	5
On kidney, and urinary tract .. .. .	52	48	—	56	—	—	156
On male generative organs .. .. .	9	89	—	—	—	—	98
On female generative organs .. .. .	165	10	—	—	—	—	175
Unclassified .. .. .	—	3	—	—	—	—	3
	674	793	—	794	1	7	2,269
Special—							
Obstetric .. .. .	27	109	—	34	—	—	170
On ear, nose and throat .. .. .	224	359	—	23	2	1	609
	925	1,261	—	851	3	8	3,048
Grand totals .. .. .	2,186		851		11		

Operations—	
Major .. .. .	928
Minor .. .. .	2,120

Operative Mortality Rates—	
Per 100 major operations ... ..	4·2
Per 100 minor operations .. .. .	0·24
Per 100 major and minor operations .. .. .	1·44

When the period of anæsthesia for an operation classified as minor exceeds half an hour, that operation is deemed a major one.

Operations performed in Theatres—

	General.	Ear, Nose and Throat.	Totals.
By Resident Surgeon .. .. .	432	170	602
By Aural Surgeon .. .. .	—	403	403
By Visiting Surgeon .. .. .	379	5	384
By other Resident Medical Officers .. .. .	127	1	128
Totals .. .. .	938	579	1,517

A detailed list of the operations performed during the year in the theatres, wards, casualty and out-patient departments would serve no useful purpose.

Below are given, under anatomical headings, the names and numbers of the operations most frequently performed.

*On Skin and Superficial Structures (839)—*

Toilet and suturing of wound .. .. .	499
Toilet and tannic acid treatment of burn or scald .. .. .	37
Incision for abscess, cellulitis, boil or carbuncle .. .. .	122
For septic infection of hand .. .. .	75

*On Bones and Joints (437)—*

With few exceptions these were in connection with fractures and dislocations, and were performed in the wards by the Resident Surgeon. Some have been detailed below the analysis of fractures. Transfixions by pin and wire (38), open operations for reduction and fixation of fragments (17), manipulations of fragments (199), and applications of plaster of Paris (138) constitute the majority of the operations in this section.

*On Abdominal Wall and Cavity (58)—*

Herniotomy for inguinal and femoral herniæ (5 strangulated) .. ..	17
Herniotomy for ventral and umbilical herniæ (3 strangulated) .. ..	8
Laparotomy—exploratory and for adhesiolysis, peritonitis, abscess, etc...	14

*On Stomach, Duodenum, Intestine, Rectum, Anus, Gall-Bladder (275)—*

For peptic ulcer (18 perforated) .. .. .	30
Enterostomy/colostomy, with/without resection .. .. .	6
Appendicectomy .. .. .	124
Appendicectomy with drainage .. .. .	76
Drainage of appendix abscess without appendicectomy . . . . .	1
Proctoscopy, sigmoidoscopy .. .. .	8
For ischiorectal and anal abscess .. .. .	6
Cholecystostomy, cholecystectomy .. .. .	4

*On Kidney, Ureter, Bladder and Urethra (156)—*

Cystoscopy (minor operation) .. .. .	51
Cystoscopy and ureteric catheterisation .. .. .	60
Suprapubic cystostomy .. .. .	4
Nephrectomy, nephrotomy .. .. .	4

*On Male Generative Organs (98)—*

Suprapubic prostatectomy, diathermy of prostate .. .. .	9
Circumcision (minor operation) .. .. .	87

*On Female Generative Organs (175)—*

On ovary and/or tube .. .. .	13
For ectopic gestation .. .. .	4
Uterine curettage .. .. .	8
Uterine/vaginal plugging and/or glycerine injection .. .. .	5
Curettage for abortion .. .. .	118
Hysterectomy .. .. .	11
Vaginal plastic operation .. .. .	5

Laparotomy was performed 314 times. This number does not include herniotomies for inguinal and femoral herniæ and open operations on the kidney and bladder; 201 laparotomies were for appendicitis. During the year 191 persons were discharged or died after operations for appendicitis.



	Males.			Females.			Totals.		
	Relieved.	Died.	Total.	Relieved.	Died.	Total.	Relieved.	Died.	Total.
Acute* .. .. .	39	1	40	49	—	49	88	1	89
Acute with local peritonitis ..	13	—	13	18	—	18	31	—	31
Acute with local abscess ..	7	—	7	4	—	4	11	—	11
Acute with general peritonitis ..	23	2	25	9	2	11	32	4	36
Subacute, chronic or interval ..	10	—	10	14	—	14	24	—	24
Totals .. .. .	92	3	95	94	2	96	186	5	191

\* Appendices proved by section to be acutely inflamed.

Operative mortality-rate of 167 acute cases = 3 per cent. (3·9 per cent. in 1933.)

2. Department of Anæsthetics.

Unless contra-indicated an injection of omnopon-scopolamine, or nembutal by mouth is used as a routine measure for basal narcosis.

Analysis of Anæsthetics administered during the Year.

	In-Patients.	Casualties and Out-Patients.	Dental.	Totals.
<i>General Anæsthesia—</i>				
By chloroform, ether or mixture ..	368	—	2	370
By ethyl chloride with/without ether ..	552	6	25	583
By nitrous oxide and oxygen ..	216	96	391*	703
By nitrous oxide, oxygen and ether ..	528	1	20	549‡
<i>Local Anæsthesia—</i>				
By application to mucous membrane ..	69	70	2	141
By freezing with ethyl chloride ..	8	—	—	8
By infiltration .. .. .	93	13	27	133
Regional by infiltration and nerve block	2	17	7	26
<i>Spinal Anæsthesia—</i>				
By intrathecal injection .. ..	12	—	—	12
Totals .. .. .	1,848	203	474	2,525

\* Administered by the nasal route.

‡ Includes 117 administrations by the endo-tracheal route.

Summary.

General anæsthetics .. .. .	2,205
Local anæsthetics .. .. .	308
Spinal anæsthetics .. .. .	12
Total .. .. .	2,525

Of the general anæsthetics given to in-patients, 204 were administered in the wards and 32 in the maternity department.

Of 2,205 general anæsthetics given in theatres, departments and wards, 1,601 were administered by Dr. Attwood.

There was one death under anæsthesia. This occurred on the third day after admission during the administration of open ether to a boy aged 6. The anæsthetic was given in the ward for the manipulation of a fracture of shaft of femur. He had also a compound fracture of the base of the skull with a major cerebral contusion.

## 3. Dental Department.

*Analysis of Patients treated, Attendances made and Treatments given during the Year.*

	Number treated.	Attendances for treatment.
Hospital in-patients .. ..	186	530
Infirmiry patients .. ..	41	166
Ante-natal clinic cases .. ..	86	174
Other out-patients .. ..	42	259
Totals .. ..	355	1,129

	Attendances.
For extractions under general anæsthesia* .. ..	431
„ „ „ local anæsthesia* .. ..	28
„ „ without anæsthesia .. ..	21
	— 480
For osteotomies for buried roots and impactions ..	11
„ fillings .. ..	13
„ gum treatment and scaling .. ..	81
„ examination and advice .. ..	390
„ fractured jaw (8) and dislocation (1) .. ..	44
„ dentures (10) and repairs (4) .. ..	64
„ miscellaneous procedures .. ..	46
Total number of attendances ..	1,129
Total number of teeth extracted (permanent 2,038, deciduous 190) .. ..	2,228
Total number of temporary dressings .. ..	6
Total number of fillings in permanent teeth .. ..	6
Total number of fillings in deciduous teeth .. ..	13

\* For analysis of dental anæsthetics, see under Department of Anæsthetics.

## 4. Radiological Department.

Hospital in-patients investigated .. ..	834
Infirmiry patients investigated .. ..	61
Out-patients investigated .. ..	820
Total patients investigated .. ..	1,715

*Analysis of Investigations made during the Year.*

	Appearances.		Totals.
	Normal.	Abnormal.	
Skull for injury .. ..	142	60	202
Skull and contents for disease or deformity ..	48	66	114
Lungs and mediastinum .. ..	116	164	280
Pleuræ and pleural conditions .. ..	11	128	139
Heart and aorta .. ..	2	11	13
Æsophagus, stomach and intestines .. ..	124	58	182
Biliary passages .. ..	24	22	46
Urinary system .. ..	75	33	108
Generative system .. ..	13	13	26
Bones and joints for injury .. ..	331	682	1,013
Bones and joints for disease or deformity ..	63	111	174
Miscellaneous—for foreign bodies, etc. .. ..	26	40	66
Dental .. ..	18	117	135
Totals .. ..	993	1,505	2,498



Special Methods of Investigation.\*

Barium meals .. .. .	131
Barium enemata .. .. .	25
Cholecystograms .. .. .	38
Lipiodol injections .. .. .	7
Pyelograms—retrograde .. .. .	26
Urograms—intravenous .. .. .	17
Screening the removal of a foreign body .. .. .	2
Manipulation and fixation of fracture—	
Under fluorescent screen .. .. .	1
Under screen and general anæsthesia .. .. .	42
	289
Average number of investigations per patient .. .. .	1.5
†Number of radiograms taken (729 being on X-ray paper) .. .. .	4,855
†Average number of radiograms per investigation .. .. .	2.1
†Average number of radiograms per patient .. .. .	3
Number of dental radiograms taken .. .. .	1,367

The number of patients investigated at 1,715 compares with 1,565 in 1933. Owing to an increase in the number of persons sent by their doctors for out-patient consultation, the number of radiological out-patient investigations has increased appreciably.

Of all investigations made during the year approximately 50 per cent. were in connection with injuries of the skull, bones and joints. Of the 993 investigations showing normal appearances 47 per cent. were made to prove the absence of fracture and/or for medico-legal purposes. The majority of the investigations of the skull and contents for disease or deformity was made in connection with cases of mastoiditis and diseases of the nasal accessory sinuses.

\* Included in the above analysis of investigations and, therefore, not additional.  
† Dental radiograms and dental patients excluded.

5. Massage and 6. Electro-Therapeutic and Light Departments.

Patients.	Massage.			Electro-Therapeutic.			Ultra-Violet Light.		
	In-patients.	Out-patients.	Total.	In-patients.	Out-patients.	Total.	In-patients.	Out-patients.	Total.
Remaining from 1933 .. .. .	14	53	67	3	12	15	5	1	6
Admitted to department .. .. .	321	419	740	94	77	171	66	18	84
Remaining under treatment .. .. .	25	34	59	10	12	22	4	3	7
Treated to a conclusion .. .. .	310*	438	748	87	77	164	67	16	83
Treatments .. .. .	4,752	5,288	10,040	1,208	1,394	2,602	742	298	1,040

Applications of radiant heat, made in conjunction with tannic acid in the treatment of burns and scalds, are not included.

Summary of Treatments.

Massage .. .. .	10,040†
Electro-therapeutic .. .. .	2,602‡
Ultra-violet light .. .. .	1,040
	13,682

The treatments given in the above-named departments comprise—Massage and remedial exercises, galvanism, faradism, sinusoidal current, radiant heat and ultra-violet light by mercury vapour lamps.

\* Of these, 127 were discharged to the out-patient massage department, where they received 2,358 of the 5,288 treatments given.  
† 849 given to patients in the Infirmary at Burnt Oak.  
‡ 407 given to patients in the Infirmary at Burnt Oak.

## 7. Maternity Department.

## I. ANTE-NATAL CLINIC

Ante-natal sessions held	..	..	..	..	..	92
Expectant mothers examined	..	..	..	..	..	657
Total attendances	..	..	..	..	..	2,723
Average number seen per session	..	..	..	..	..	29.6
Average number of attendances per expectant mother	..	..	..	..	..	4.1
Women referred for dental treatment	..	..	..	..	..	86
Women referred for pathological investigation	..	..	..	..	..	31
Women referred for radiological investigation	..	..	..	..	..	36

## II. STATISTICAL TABLES AND ANALYSES OF CONFINEMENTS.

*Analysis of the 460 Women Delivered who were discharged or who died during the year.\**

						Per cent.
Mother Admitted	..	Via ante-natal clinic			..	92
	..	As an emergency case			..	8
		Total	..	..	..	460
						100
Civil State	..	..	Married	..	..	422
	..	..	Unmarried	..	..	38
		Total	..	..	..	460
						100
Parous State	..	..	Primipara	..	..	279
	..	..	Multipara	..	..	181
		Total	..	..	..	460
						100
Presentation	..	Vertex—occipito-anterior			..	423
	..	Vertex—occipito-posterior			..	18
	..	Breech—uncomplicated			..	7
	..	Breech—complicated			..	12
	..	Face			..	2
	..	Transverse			..	2
	..	Born before admission			..	—
		Total	..	..	..	464

There were 4 sets of twins—

Both vertex occipito-anterior	..	..	..	..	..	1 set.
Vertex occipito-anterior and a breech	..	..	..	..	..	2 sets.
Both breech	..	..	..	..	..	1 set.

\* One woman died undelivered, making a total of 461 discharged from the department.



Appendix II.  
Induction of Labour.

Indication.	Number of Cases that had Induction.		
	Of Premature Labour.	At or After Term.	Totals.
Disproportion .. .. .	2	10	12
Maternal toxæmia .. .. .	1	11	12
Inertia and/or ruptured membranes .. .. .	—	4	4
Post-maturity .. .. .	—	3	3
Maternal disease .. .. .	1	2	3
Ante-partum hæmorrhage .. .. .	1	1	2
Bad obstetric history .. .. .	—	1	1
Totals .. .. .	5	32	37

Induction of labour was undertaken in 37 cases (8 per cent. of labours).  
In 34 cases it succeeded and delivery was by natural forces :—  
In 23 cases after one medical induction.  
In 4 cases after two medical inductions.  
In 7 cases after one or more medical inductions followed by bougies.  
In 3 cases the puerperium was morbid (see Analysis of pyrexial cases).  
Of 3 cases in which medical induction failed :—  
2 were delivered by forceps (uterine inertia, disproportion).  
1 was delivered by traction-extension to scalp (ante-partum hæmorrhage).  
There were 35 live births, 2 still-births and 3 neo-natal deaths.

Method of Delivery of the 464 Infants Born and Discharged.

Method of Delivery.	No. of Births.	Deaths.		
		Maternal.	Fœtal.	Neo-Natal.
Natural forces . . . . .	399	2	10	7
Natural forces after induction .. .. .	34	1	—	3
Manual.. .. .	5	—	2	1
Manual, complicated breech .. .. .	6	—	5	—
Forceps .. .. .	3	—	—	—
Forceps after induction .. .. .	2	—	1	—
Forceps after failed forceps.. .. .	1	—	—	—
Version.. .. .	1	—	—	—
Traction-extension to scalp.. .. .	2	—	1	—
Traction-extension to scalp after induction .. .. .	1	—	1	—
Cæsarean section .. .. .	9	—	—	1
Embryotomy .. .. .	1	—	1	—
Totals .. .. .	464	3	21	12

Midwives delivered .. .. . 440 women  
Doctors delivered .. .. . 20 „  
Midwives sought medical assistance for .. .. . 83 „  
Forceps-rate .. .. . 1·3 per 100 births.  
Maternal morbidity-rate after forceps .. .. . Nil.  
Anæsthetics given for obstetric purposes .. .. . 36  
Average length of lying-in period in days .. .. . 14·3

Pregnancy and Labour.

Conditions of both pregnancy and labour normal..	338	..	73·5 per cent.
Conditions of either or both abnormal .. ..	118	..	25·6 „
Multiple cyesis and labour, normal and abnormal	4	..	0·9 „
Total .. .. .	460		100 „

Obstetric Operations performed during the Year.

Surgical induction	..	..	..	..	..	..	7
Vaginal plugging	..	..	..	..	..	..	2
Internal version	..	..	..	..	..	..	1
Manual delivery under general anæsthesia	..	..	..	..	..	..	6
Episiotomy and repair	..	..	..	..	..	..	1
Traction-extension to scalp under general anæsthesia	..	..	..	..	..	..	3
Application of forceps	..	..	..	..	..	..	6
Cæsarean section	..	..	..	..	..	..	7
Cæsarean section and sterilisation	..	..	..	..	..	..	2
Embryotomy	..	..	..	..	..	..	1
Manual removal of placenta and/or membranes	..	..	..	..	..	..	6
Repair of perineum—tear grade 1	..	..	..	..	..	72	
tear grade 2	..	..	..	..	..	22	
tear grade 3	..	..	..	..	..	—	
							94
Total	..	..	..	..	..	136	

Indications for which Cæsarean sections were done :—

Indication.	Booked.	Emergency.	Totals.
Contracted pelvis and disproportion	4	—	4
Chronic rheumatic carditis	2	—	2
Chronic rheumatic carditis and sterilisation	1	1	2
Placenta prævia	1	—	1
Totals	8	1	9

In each case the classical operation was done.  
There was not a maternal or foetal death.  
There was one neo-natal death due to spina bifida.

Maternal Morbidity.

The figures given under this head relate to women admitted to the maternity department for delivery and to booked cases delivered before admission. Of this group all who had pyrexia in the puerperium (Ministry of Health standard) and all who died after delivery or undelivered are included as morbid.

Cases of abortion and ectopic gestation are not admitted to the department. The maternal morbidity of cases of abortion is given under the head of abortion. No case of ectopic gestation was morbid.

—	Booked.	Emergency.	Totals.
Pyrexial cases that survived	12	4	16
Pyrexial cases that died	1	1	2
Non-pyrexial maternal deaths	2*	—	2†
Pyrexial cases and maternal deaths	15†	5	20†
Number of women delivered	425†	36	461†
Maternal morbidity-rate per 1,000 delivered	35·3	138·9	43·4

\* One died undelivered.  
† Includes one who died undelivered.

Pyrexia in the Puerperium.

The Ministry of Health standard of puerperal pyrexia is adopted.

Unless there is definite evidence to the contrary every case of pyrexia occurring in the puerperium is assumed to be due to uterine infection.

In addition to the conditions generally accepted as sequelæ of uterine infection, the following, when they occur in the puerperium, are returned also under that head :—thrombosis, thrombophlebitis, phlegmasia alba dolens, pulmonary embolus, pneumonia and broncho-pneumonia.

During the year 18 cases of pyrexia in the puerperium occurred. 16 recovered and were discharged ; 2 died.



Analysis of the 18 Puerperal Pyrexial Cases.

Register No.	Age.	Gravida.	Maturity. (weeks)	Complication of Labour and/or Maternal Complication.	Method of Delivery.	Pyrexia.*		Cause of Pyrexia.	Cervical Swabbing.	Duration of Pyrexia in days.†	Births.
						Date of Onset.	Day of Puer- perium.				
1	27	2	40	None .. .. .	Natural forces ..	31 Dec. ..	4	Uterine infection .. ..	H.S.	6	Live.
88	17	1	40	Disproportion, Leucorrhœa	Natural forces** ..	2 Jan. ..	3	Uterine infection, peritonitis ..	H.S.	74	"
61	25	2	40	None .. .. .	" ..	26 Feb. ..	1	Follicular tonsillitis ..	—	2	"
85	24	1	40	Pyelitis and uterine inertia	Manual ..	28 " ..	1	Perineal sepsis ..	—	2	"
91	22	1	40	External version for breech	Natural forces ..	16 Mar. ..	8	Mastitis ..	—	6	"
137	21	1	40	Chronic rheumatic carditis	Cæsarean ..	1 Apr. ..	16	Uterine infection ..	—	10	"
114E	39	6	27	Miliary tuberculosis ..	Natural forces†† ..	8 " ..	1	Miliary tuberculosis ..	—	8	"
154E	29	1	40	Extended breech ..	Manual ..	28 " ..	2	Uterine infection ..	N.H.S.	8	S.B.
194E	36	5	40	Impacted breech ..	Craniotomy ..	6 May ..	1	" ..	H.S.	43	S.B.
161	26	2	40	Pulmonary tuberculosis ..	Natural forces ..	15 May† ..	—	Pulmonary tuberculosis ..	—	14	Live.
264	28	2	40	Uterine inertia, twins ..	" ..	29 June ..	3	Uterine infection ..	N.H.S.	33	2 Live.
253	20	1	40	None .. .. .	" ..	14 July ..	3	" ..	N.H.S.	7	Live.
278	21	1	40	" .. .. .	" ..	14 Aug. ..	7	Mastitis, alveolar abscess..	—	5	"
284	23	1	40	" .. .. .	" ..	18 " ..	14	Mastitis ..	—	3	"
375	39	4	40	Toxæmia and endocervicitis	Natural forces†† ..	26 " ..	5	Uterine infection ..	N.H.S.	41	"
356E	22	1	40	Rigid perineum, episiotomy	Natural forces ..	26 " ..	1	" ..	—	10	"
389E	28	1	28	Pulmonary tuberculosis ..	" ..	11 Nov.‡	—	Pulmonary tuberculosis ..	—	8	"
444	35	3	40	Persistent occipito-posterior	" ..	7 Dec. ..	2	Uterine infection ..	H.S.	17	"

\* Date and day of the second recording of a temperature of 99° F. or over. In every case the date given here is earlier than that on which the pyrexia became notifiable.  
† From date of onset to date of settlement at normal. E after a register number indicates an emergency case. N.H.S.—Non-hæmolytic streptococci. H.S.—Hæmolytic streptococci (S. pyogenes).  
S.B.—Stillbirth. ‡ Date of delivery, pyrexia pre-existed. †† After medical induction. ‡‡ After surgical induction.

Summary of the 18 pyrexial cases.

Uterine infection (puerperal fever)	..	..	..	10
Breast condition	..	..	..	3
Tuberculosis (miliary and pulmonary)	..	..	..	3
Follicular tonsillitis	..	..	..	1
Perineal sepsis	..	..	..	1
Total	..	..	..	18

16 cases recovered and were discharged, case 114E and case 444 died. Of the 18 women who had pyrexia in the puerperium, 10 were primiparæ.

Maternal Deaths.

Register No.	Age.	Gravida.	Maturity.	Complication of Labour and/or Maternal Complication.	Method of Delivery.	Class I.*	Class II.*	Group 1.*	Group 2.*	Births.
114 E	39	6	27	Miliary tuberculosis	..	..	..	..	..	..
241	26	3	40	None	..	..	..	..	..	..
303	43	9	40	Stenosis of cervix, primary uterine inertia	..	..	..	..	..	..
444	35	3	40	Persistent occipito-posterior	..	..	..	..	..	..
4						3	1	2	2	3

Case 114 E had not attended an ante-natal clinic. She died from miliary tuberculosis 7 days after delivery. Case 241 died suddenly 11 days after delivery. A post-mortem examination was made and death was found to be due to pulmonary embolus consequent upon thrombophlebitis of the pelvic veins due to septic endometritis and a small portion of retained placenta. Her puerperium was afebrile and apparently normal. Case 303 failed to seek admission until 5 days after rupture of the membranes. On admission the liquor was offensive. Bonney's trachelorrhaphy had been done elsewhere in 1933. She died from toxic shock. Case 444 died from puerperal septicæmia due to a hæmolytic streptococcal infection. Serological relationship between the hæmolytic streptococcus grown from her nasal swabbing, and that from her cervical swabbing has not yet been proved by agglutinin absorption tests.

Maternal Mortality Rates.

Per 1,000 Booked cases delivered (one death undelivered)	= 7.1
Per 1,000 Emergency cases delivered	= 27.8
Per 1,000 Total cases delivered (one death undelivered)	= 8.7

\* Vide Final Report of Departmental Committee on Maternal Mortality and Morbidity, 1932. Class I.—Deaths directly due to childbearing (abortions and ectopics are not included here); Class II.—Death due to an independent disease; Group 1.—Cases showing a primary avoidable factor; Group 2.—Case showing no primary avoidable factor. E after a register number indicates an emergency case.



### III. MATERNITY INFANTS' REPORT.

*Births.*

								Per cent.
Full time	..	..	..	..	..	..	412	88·8
Premature	..	..	..	..	..	..	31	6·7
Stillborn	..	..	..	..	..	..	21	4·5
							<hr/>	<hr/>
Total births			..	..	..	..	464	100

Average weight at birth of infants—booked cases .. .. 7 lbs. 4 ozs.

Average weight at birth of infants—emergency cases . . . 6 lbs. 0 ozs.

Infants not entirely breast fed	..	..	..	..	21
---------------------------------	----	----	----	----	----

*Stillbirths.*

### Details of the 21 Stillbirths.

Maternal Complication.	Method of Delivery.	Infant.	Cause of Fœtal Death.
Booked (12)—			
Toxæmia of pregnancy .. ..	Natural forces .. ..	P.M.	Maternal toxæmia.
Uterine inertia .. ..	Forceps* .. ..	F.T.	Intra-cranial hæmorrhage.
Complicated breech .. ..	Manual .. ..	P.	„ „
„ „ .. ..	Natural forces .. ..	F.T.	Fœtal shock.
Face presentation .. ..	Manual .. ..	F.T.	„ „
Placenta prævia .. ..	Natural forces .. ..	F.T.	Detached placenta.
„ „ .. ..	Scalp-traction .. ..	P.	„ „
Breech, placenta prævia.. ..	Manual .. ..	F.T.	„ „
None (normal breech) .. ..	Natural forces .. ..	P.	Exomphalos.
Disproportion (infant 9-10) ..	„ „ .. ..	F.T.M.	Post-maturity.
„ ( „ 9-0) .. ..	„ „ .. ..	F.T.	Intra-cranial hæmorrhage.
None .. ..	„ „ .. ..	F.T.	Unknown.
Emergencies (9)—			
Pyelitis, extended breech ..	Manual .. ..	P.M.	Maternal disease.
Toxic ante-partum hæmorrhage	Natural forces .. ..	F.T.	Maternal toxæmia.
„ „ „ .. ..	„ „ .. ..	P.	„ „
Breech with extended legs ..	Manual .. ..	F.T.	Fœtal shock.
Complicated breech .. ..	„ „ .. ..	F.T.	„ „
Placenta prævia .. ..	Scalp-traction .. ..	P.	Detached placenta.
Disproportion (infant 9-4) ..	Manual† .. ..	F.T.	Intra-cranial hæmorrhage.
„ ( „ 8-10) .. ..	Natural forces .. ..	F.T.	Hydrocephalus.
Complicated breech .. ..	Embryotomy .. ..	F.T.	„ &c.

\* After medical induction; F.T. — Full-time; F.T.M. — Full-time macerated; P — Premature; P.M. — Premature, macerated.

† —Failed-forceps before admission.

### Summary of causes of stillbirths.

Cause of Stillbirth.							Booked.	Emergency.	Totals.
Maternal conditions	..	..	..	..	..	..	1	3	4
Complications of labour		..	..	..	..	..	4	2	6
Placental states	..	..	..	..	..	..	3	1	4
Foetal states	..	..	..	..	..	..	3	3	6
Unknown	..	..	..	..	..	..	1	—	1
Totals							12	9	21

Neo-Natal Deaths.

Details of the 12 Neo-Natal Deaths (deaths within 4 weeks of birth).

Cause of Death.	Maternal Complication.	Method of Delivery.	Weight at Birth.	Age.
Booked (8)—			lbs. ozs.	
Prematurity ..	None .. .. .	Natural forces ..	4 2	8 hours.
„ ..	Toxæmia .. .. .	„ * ..	4 6	4 days.
„ ..	Toxæmia, 2nd twin ..	„ ..	4 2	15 hours.
„ ..	Complicated breech ..	„ ..	3 1	7 „
Spina bifida ..	Toxæmia .. .. .	„ * ..	6 2	1 hour.
„ ..	Contracted pelvis ..	Cæsarean ..	8 0	2 days.
Congenital heart ..	None .. .. .	Natural forces ..	5 0	12 hours.
Fœtal shock ..	Breech, 2nd twin ..	„ ..	5 12	10 mins.
Emergencies (4)—				
Prematurity ..	Ante-partum hæmorrhage ..	Natural forces ..	3 1	1 hour.
„ ..	Miliary tuberculosis ..	„ * ..	3 0	7 hours.
„ ..	Ante-partum hæmorrhage ..	„ ..	3 0	7 „
Fœtal shock ..	Transverse presentation ..	Manual † ..	5 12	27 hours.

\* After induction.  
† External version under general anæsthesia failed before admission, successfully repeated after admission.

Summary of causes of Neo-Natal Deaths.

	Booked.	Emergency.	Totals,
Prematurity .. .. .	4	3	7
Congenital abnormality .. .. .	3	—	3
Birth injury .. .. .	1	1	2
Totals .. .. .	8	4	12

Infantile Mortality Rates.

		Per cent.
Of 464 infants born	21 were stillborn and 12 died	= 7·1
Of 443 infants born alive	12 died within 4 weeks of birth	= 2·7
Of 31 premature infants born alive	7 „ „ „	= 22·6



IV. ANALYSIS OF CASES OF NORMAL AND ABNORMAL PREGNANCY, PARTURITION AND PUERPERIUM  
TREATED TO A CONCLUSION IN MATERNITY AND OTHER WARDS DURING THE YEAR.

	Booked.	Emergencies.	Totals.
Pregnancy, normal .. .. .	4	7	11
Pregnancy and spurious labour pains .. .. .	12	—	12
Toxæmia of pregnancy .. .. .	1	2	3
Ectopic gestation .. .. .	—	5	5
Pregnancy and ante-partum hæmorrhage .. .. .	1	—	1
Pyelitis of pregnancy .. .. .	4	8	12
Other affections connected with pregnancy .. .. .	1	6	7
Abortion, threatened .. .. .	1	6	7
„ incomplete and complete .. .. .	1	101	102
„ missed .. .. .	—	—	—
„ with post-abortion infection/sequela .. .. .	—	32	32
Labour, normal .. .. .	324	14	338
„ normal and toxæmia of pregnancy .. .. .	15	5	20
„ normal and affection connected with pregnancy .. .. .	8	4	12
„ abnormal .. .. .	50	11	61
„ abnormal and toxæmia of pregnancy .. .. .	17	—	17
„ abnormal and affection connected with pregnancy .. .. .	6	2	8
„ multiple .. .. .	4	—	4
Puerperium, normal* .. .. .	5	6	11
Affections consequent on parturition* .. .. .	1	19	20
Totals .. .. .	455	228	683

Among the 683 cases analysed above there occurred 10 deaths. Details of 4 of these are given under the head of maternal deaths. The remaining 6 occurred in emergency cases; one was due to post-partum hæmorrhage and 3 were due to puerperal sepsis in women admitted for these conditions after delivery in the neighbourhood; 2 were due to septicæmia consequent upon incomplete abortion.

Abortion. ..

(Therapeutic inductions and cases of threatened abortion are not included.)

Cases treated to a conclusion .. .. .	134
Pyrexial cases that survived .. .. .	21
Pyrexial cases that died .. .. .	2
Pyrexial cases and deaths .. .. .	23
Maternal morbidity rate per 1,000 women who aborted .. .. .	171·6

V. POST-NATAL CLINIC.

	Mothers.	Infants.	Totals.
Number of patients .. .. .	32	129	161
Number of attendances .. .. .	38	223	261

\* Admitted and treated as such.

## 8. Pathological Department.

*Analysis of Investigations made during the Year.*

	Made at	
	Redhill County Hospital.	Other Hospitals.*
Ear, nose and throat swabs—culture for organisms ..	5	335
Cervix uteri swab—culture for organisms .. ..	—	13
Pus—stained smear for organisms .. ..	33	—
„ —culture for organisms .. ..	—	17
Smear—stained for gonococci .. ..	13	3
Blood—counts .. ..	249	—
„ —platelet counts .. ..	8	—
„ —coagulation/bleeding times .. ..	5	—
„ —grouping .. ..	135	—
„ —agglutination for T.A.B.C. .. ..	—	5
„ —Wassermann reaction .. ..	—	80
„ —chemical estimations .. ..	79	—
„ —culture for organisms .. ..	—	6
Cerebro-spinal fluid—various investigations .. ..	15	9
Pleural fluid—various investigations .. ..	34	31
Urine—microscopy of centrifugal deposit .. ..	619	—
„ —bacteriological investigations .. ..	7	5
„ —chemical investigations .. ..	129	—
Fractional test meal .. ..	5	—
Sputum—stained smear for tubercle bacilli .. ..	128	—
Fæces—bacteriological and other investigations .. ..	3	4
„ —for occult blood .. ..	20	—
„ —chemical investigations .. ..	—	—
Miscellaneous investigations .. ..	1	3
Pathological material for section and report .. ..	—	54
Post-mortem examinations .. ..	95	—
Totals .. ..	1,583	565
Total investigations .. ..	2,148	

## Post-mortem examinations :—

On the bodies of 234 persons who died in hospital, 77 examinations were made. This gives an autopsy rate of 33 per cent. The remaining 18 examinations were made on bodies brought here for autopsy, on persons brought in dead and on stillborn infants.

\* North Middlesex County Hospital, University College Hospital and Queen Charlotte's Hospital Research Laboratory.



9. Ear, Nose and Throat Department.

*Analysis of Operations performed during the Year.*

For aural furuncle, foreign body in ear, etc. . . . .	17
Paracentesis tympani . . . . .	8
Paracentesis and removal of tonsils and/or adenoids . . . . .	8
Mastoidectomy—(Schwartz, 98 ; radical, 11) . . . . .	109
Mastoid cauterisation, curettage, plastic (4), etc. . . . .	35
Submucous resection of septum . . . . .	5
Antral puncture and wash-out . . . . .	10
On nose and sinuses (various) . . . . .	6
Removal of tonsils and adenoids by guillotine . . . . .	296
Removal of tonsils by dissection . . . . .	84
Removal of tonsillar remains by dissection . . . . .	14
For hæmorrhage from tonsillar fossa . . . . .	6
Quinsies opened . . . . .	4
Laryngoscopy . . . . .	1
Mastoid/aural, examination/dressing under general anæsthesia . . . . .	6
Total . . . . .	609

The enucleation of tonsils and adenoids by blunt guillotine (Sluder method) is classified as a minor operation.

On completion of a mastoidectomy, adenoidectomy, if indicated, is performed as a routine procedure. Additional operations such as this are not included in the above analysis.

*Operative Mortality.*—There were 3 post-operation deaths. (1) A boy of 14, admitted as an emergency case, died of meningitis after a radical mastoidectomy for chronic mastoiditis and meningitis. Both maxillary antra and his left fronto-ethmoidal cells were also infected. (2) A man of 24 died of septicæmia 8 days after a left-sided Schwartz operation done for acute mastoiditis which had developed in the course of a very severe attack of influenza. (3) A man of 53 died 4 hours after a sub-mucous resection of septum and removal of bilateral multiple nasal polypi done under general anæsthesia. At post-mortem examination no intracranial injury or infection was found. There was marked emphysema of the lungs. Death was due to shock.

10. Therapeutic, Diagnostic and Prophylactic Procedures.\*

*Analysis of Special Procedures.*

Injection of serum or vaccine . . . . .	466
Injection of saline, subcutaneous and intraperitoneal . . . . .	19
Multiple punctures of oedematous legs . . . . .	1
Autohæmotherapy . . . . .	17
Blood transfusion (auto. and hetero.) . . . . .	30
Intravenous injection of saline or drug . . . . .	14
Venesection . . . . .	3
Lumbar puncture . . . . .	45
Paracentesis of pleural cavity . . . . .	67
Paracentesis of abdominal cavity . . . . .	1
Gastric lavage . . . . .	18
Jennerian vaccination . . . . .	208
Total . . . . .	889

\* None of these has been included in the foregoing lists of operations.

## 11. Casualty and Out-Patient Departments

Casualties—medical and surgical	..	..	..	..	..	1,327
In-patients made out-patients	..	..	..	..	..	926
Ante-natal cases	..	..	..	..	..	657
*Other out-patients	..	..	..	..	..	2,930
Total casualties and out-patients treated						5,840
Patients on the books at the beginning of the year						371
New casualties and out-patients						5,469
Total						5,840

*Departments in which the above were treated.*

Department.	Patients.	Attendances.
Medical .. .. .	286	834
Surgical .. .. .	1,588	4,225
Ante-natal .. .. .	657	2,723
Post-natal .. .. .	161	261
Ear, nose and throat .. .. .	1,165	5,466
Dental .. .. .	169	599
Orthopædic and fracture clinic .. .. .	353	1,687
X-ray .. .. .	881	1,021
Massage and Swedish remedial exercises .. .. .	472	5,288
Electro-therapeutic and light.. .. .	108	1,692
Totals .. .. .	5,840	23,796

Average number of attendances per patient, 4·1.

\* Patients referred by medical practitioners for a specialist's opinion and/or some special investigation or form of treatment.

*Operations—*

Suturing of wound	..	..	..	..	..	..	383
Toilet and tannic acid treatment of burn or scald	..	..	..	..	..	..	21
Incision of abscess, etc.	..	..	..	..	..	..	39
For septic infection of hand	..	..	..	..	..	..	38
Injection of varicose vein, etc.	..	..	..	..	..	..	36
Removal of foreign body in eye	..	..	..	..	..	..	41
Removal of foreign body in limb..	..	..	..	..	..	..	31
Manipulation of fracture or dislocation	..	..	..	..	..	..	118
Application of plaster of Paris	..	..	..	..	..	..	17
Genito-urinary—various	..	..	..	..	..	..	56
External version—in ante-natal clinic	..	..	..	..	..	..	34
Ear, nose and throat—various	..	..	..	..	..	..	23
Miscellaneous	..	..	..	..	..	..	14
Total	..	..	..	..	..	..	851

Anæsthetics—general	..	..	..	..	..	..	103
Anæsthetics—local	..	..	..	..	..	..	110
Total	..	..	..	..	..	..	213

Admitted to hospital from out-patient department	..	..	..	..	362
Admitted to hospital from ante-natal clinic	..	..	..	..	455

12. Nurses' Sick Room.

Complement of nurses at 31st December	..	..	..	..	..	92
Average daily complement of nurses	..	..	..	..	..	89·3
Average daily complement of nurses available for duty	..	..	..	..	..	85·1
Nurses off duty sick during the year	..	..	..	..	..	41*
Nursing days lost (sick leave included)	..	..	..	..	..	656
Average number of nursing days lost per annum—						
Per sick nurse	..	..	..	..	..	16
Per nurse of the average daily complement	..	..	..	..	..	7·3

Based on the figure of the average daily complement 46 per cent. of the nursing staff was admitted to the sick room in 1934. This compares with 60 per cent. in 1933 and 65 per cent. in 1932. In 1933 the average number of nursing days lost per nurse of the average daily complement was 10·1.

Disabilities.	No.	Major Operations.	Minor Operations.
Ear, nose and throat conditions	14	2	1
Septic conditions of finger	9	—	7
Eye conditions	6	—	—
Septic conditions of skin and areolar tissue	5	—	—
Injuries	4	—	—
Miscellaneous	4	—	—
Intestinal conditions	3	1	—
Lymphadenitis	3	—	—
Pleurisy	3	—	—
Totals..	51	3	8

\* 6 nurses off duty twice, 2 nurses off duty thrice, making 51 admissions to the nurses' sick room.



Comparative Tables.

	1932.	1933.	1934.
Beds—complement at 31st December .. .. .	215	215	215
„ average daily complement .. .. .	215	215	215
„ average daily number available .. .. .	209·7	209·6	206·2
„ average daily number occupied .. .. .	190	192	185
Average daily percentage of available beds occupied ..	90·6	91·7	89·7
Patients per occupied bed—average number per annum..	18·5	19·7	21·5
Nursing staff—average daily complement .. .. .	76·7*	81·9†	89·3‡
Occupied beds—average number per nurse.. .. .	2·5*	2·3†	2·1‡
Admissions—average daily number .. .. .	9·4	10·4	10·8
„ percentage by Medical Superintendent .. .. .	50·3	48·6	47·8
On danger list—average daily percentage .. .. .	10·5	12·2	14·3
Length of stay—average in days per patient .. .. .	19·8	18·6	16·7
Medical cases .. .. .	748	810	901
Surgical cases .. .. .	2,768	2,972	3,071
Total cases treated to a conclusion .. .. .	3,516	3,782	3,972
Patients—cured .. .. . per cent.	72·6	73·3	69·7
„ relieved .. .. . „	19·1	19·5	22·6
„ unrelieved .. .. . „	2·5	1·5	1·8
„ died .. .. . „	5·8	5·7	5·9
Operations—major .. .. .	866	952	928
„ major and minor .. .. .	2,813	2,888	3,048
Anæsthetics—general .. .. .	2,127	2,071	2,205
Dental patients .. .. .	301	286	355
„ attendances for treatment .. .. .	1,031	1,022	1,129
Radiological investigations .. .. .	2,268	2,685	2,498
Massage treatments .. .. .	5,196	8,441	10,040
Electro-therapeutic and light treatments .. .. .	1,790	2,884	3,642
Ante-natal clinic—women examined .. .. .	652	655	657
„ „ „ attendances .. .. .	2,450	2,330	2,723
Confinements .. .. .	520	474	460
Maternal mortality rate per 1,000 delivered .. .. .	11·5	6·3	8·7
Maternal morbidity rate per 1,000 delivered .. .. .	73·1	58·9	43·4
Births .. .. .	529	484	464
Stillbirth rate .. .. . per cent.	4·0	3·9	4·5
Infantile mortality rate per 100 total births .. .. .	7·2	7·9	7·1
Infantile mortality rate per 100 born alive .. .. .	3·4	4·1	2·7
Pathological investigations .. .. .	1,368	1,966	2,148
Casualties and out-patients .. .. .	3,249	4,673	5,840
Casualty and out-patient attendances .. .. .	11,583	18,716	23,796

\* Includes Matron, 8 nurses not employed in the wards and 3 masseuses. (Total, 12.)  
† Includes Matron, 13 sisters and nurses not employed in the wards and 3 masseuses. (Total, 17.)  
‡ „ 14 „ „ „ „ 3 „ (Total, 18.)

## APPENDIX III.

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ANNUAL REPORT ON THE WORK OF CENTRAL MIDDLESEX COUNTY HOSPITAL  
DURING 1934, PREPARED BY THE MEDICAL SUPERINTENDENT.

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The beds in this hospital have been fully occupied throughout the year. At times the male and alternately the female sides have been full to overflowing, and cases have had to be referred to other hospitals.

A maternity block is badly needed, as the top floor of the children's block is being used for this purpose. In the winter the children's wards are full and many cases have had to be put in the adult wards.

The maternity work has increased considerably, and at times cases have had to be accommodated in the main wards.

The old maternity block is being used for ante-natal clinics, and will be used in the future for out-patient activities.

An additional Medical Officer joined the staff in May, and has been very useful, especially in attending the Children's Homes, where there are about 200 children, who have required a good deal of attention.

**Staff.**

## WHOLE-TIME MEDICAL STAFF.

*Medical Superintendent—*

W. E. Turner, M.R.C.S., L.R.C.P.

*Deputy Medical Superintendent—*

T. G. I. James, M.Ch., B.Sc., M.B., F.R.C.S. (Eng.), F.R.C.S. (Edin.).

*Assistant Medical Officers—*

N. M. Matheson, M.B., Ch.B., F.R.C.S. (Eng.),

M.R.C.P. (Lond.).

A. D. Abdullah, M.B., Ch.M., M.R.C.P.

J. Sakula, M.B., B.S.

J. S. MacVine, M.B., B.S., M.C.O.G.

H. Canwarden, M.R.C.S., L.R.C.P.

## VISITING MEDICAL STAFF.

*Radiologist—*

A. Flett, M.D., D.M.R.E.

*Electro-Therapist—*

C. A. Robinson, M.A., M.B., B.Ch., D.M.R.E.

## NURSING STAFF.

*Matron*—Miss B. Gebhard. *Nurses*—270 (including male nurses and midwives).

Beds.

	Males.	Females.	Children's Cots.
Acute medical .. .. .	117	142	36
Acute surgical .. .. .	70	50	38
Chronic sick (including feeble minded) .. .. .	94	183	—
Mental (short stay) .. .. .	3	3	—
Tuberculosis .. .. .	9	8	—
Maternity .. .. .	—	28	28
Nursery .. .. .	—	10	40
Total .. .. .	293	424	142

Total number of beds .. .. .	859
Daily average number of beds occupied .. .. .	782
Maximum number of beds occupied .. .. .	869—19.1.34.
Minimum number of beds occupied .. .. .	683—30.8.34 and 21.9.34.

Statistical Tables for the Year ended 31st December, 1934.

Remaining in hospital, 1st January, 1934 .. .. .	822
Admitted .. .. .	5,602
Born in hospital .. .. .	604
	7,028
Discharged .. .. .	5,377
Died .. .. .	834
Patients treated to a conclusion during the year .. .. .	6,211
Remaining in hospital on 31st December, 1934 .. .. .	817

Classification of Patients Treated to a Conclusion.

Male infants under 3 .. .. .	585
Boys, 3-16 .. .. .	326
Men .. .. .	1,719
	2,630
Female infants under 3 .. .. .	475
Girls, 3-16 .. .. .	240
Women .. .. .	2,866
	3,581
Total .. .. .	6,211

1.—TABLE SHOWING DURATION OF STAY OF THE 6,211 PATIENTS TREATED TO A CONCLUSION DURING THE YEAR.

Four weeks or less .. .. .	4,498
Exceeding four weeks but under thirteen weeks .. .. .	1,288
Exceeding thirteen weeks .. .. .	425
Total .. .. .	6,211



II.—TABLE SHOWING WHITHER THE 6,211 PATIENTS WERE DISCHARGED.

Home .. .. .	4,961
To other public assistance institutions .. .. .	134
Fever hospitals .. .. .	34
Sanatoria .. .. .	29
Convalescent homes .. .. .	15
Mental hospitals .. .. .	192
Voluntary hospitals .. .. .	12
Died .. .. .	834
	<hr/>
	6,211
	<hr/>

III.—TABLE SHOWING THE RESULTS OF TREATMENT OR THE TERMINATION.

		Per cent.
Cured .. .. .	4,203	67·67
Relieved .. .. .	767	12·35
In statu quo .. .. .	407	6·55
Died .. .. .	834	13·43
	<hr/>	<hr/>
	6,211	100·00
	<hr/>	<hr/>

Deaths.

Ages.	Male.	Female.	Total.
Under 1 year .. .. .	21	22	43
1-5 years .. .. .	12	12	24
5-10 years .. .. .	5	5	10
10-15 years .. .. .	8	3	11
15-20 years .. .. .	8	2	10
20-30 years .. .. .	15	21	36
30-40 years .. .. .	25	23	48
40-50 years .. .. .	30	30	60
50-60 years .. .. .	74	52	126
60-70 years .. .. .	99	76	175
70-80 years .. .. .	93	106	199
Over 80 years .. .. .	26	66	92
	<hr/>	<hr/>	<hr/>
Totals .. .. .	416	418	834

Deaths within 24 hours of admission .. .. .	103
Deaths within 48 hours of admission .. .. .	44
Deaths within 72 hours of admission .. .. .	30
	<hr/>
	177
All other deaths .. .. .	657
	<hr/>
Total.. .. .	834
	<hr/>

IV.—TABLE SHOWING THE DISTRICTS TO WHICH THE 6,211 DISCHARGES BELONGED.

Willesden .. .. .	4,626
Acton .. .. .	479
Hendon and Harrow .. .. .	741
Other areas.. .. .	365
	<hr/>
Total.. .. .	6,211
	<hr/>

V.—TABLE SHOWING HOW THE 6,211 DISCHARGES WERE ADMITTED.

By relieving officers' orders .. .. .	4,234
By Medical Superintendent—	
Births .. .. .	617
Police cases (other than accidents) .. .. .	70
Accidents .. .. .	147
Maternity cases (emergency) .. .. .	315
Transfers .. .. .	93
Other urgent cases .. .. .	735
Total .. .. .	6,211

CLASSIFICATION OF THE DISEASES FOR WHICH THE 6,211 PATIENTS WERE PRIMARILY TREATED.

Disease or Condition.	Children under 16 Years of Age.		Men and Women.	
	Dis- charged.	Died.	Dis- charged.	Died.
Acute infectious disease .. .. .	97	4	98	43
Influenza .. .. .	1	—	20	—
Tuberculosis, pulmonary .. .. .	2	—	68	38
„ non-pulmonary .. .. .	—	—	7	—
Malignant disease .. .. .	—	1	42	118
Rheumatism, acute.. .. .	28	—	77	—
„ non-articular .. .. .	4	2	25	2
„ chronic arthritis .. .. .	1	—	59	1
Venereal disease .. .. .	—	—	10	1
Puerperal pyrexia .. .. .	—	—	14	2
„ fever (a) Women confined in Hospital .. .. .	—	—	—	—
„ „ (b) Admitted from outside .. .. .	—	—	—	—
Diseases of child-bearing .. .. .	—	—	286	3
Mental diseases (senile dementia) .. .. .	—	—	6	1
„ „ (other) .. .. .	8	—	286	3
Senile decay .. .. .	—	—	66	98
Accidental injury and violence .. .. .	82	2	373	11
Disease of nervous and sense organs .. .. .	94	12	234	27
„ respiratory system .. .. .	110	15	263	58
„ circulatory system .. .. .	1	4	199	222
„ digestive system .. .. .	183	15	525	37
„ genito-urinary system .. .. .	29	—	223	39
„ skin .. .. .	64	2	117	7
Other diseases .. .. .	94	10	227	33
Maternity, mothers .. .. .	—	—	606	4
„ infants .. .. .	603	19	—	—
No disease .. .. .	141	—	4	—
Totals .. .. .	1,542	86	3,835	748

Grand total . . . .6,211.

*Diseases and Conditions Treated to a Conclusion.*

(Grouped in order of frequency.)

	<i>Treated.</i>	<i>Died.</i>
Pregnancy, parturition and puerperium.. ..	916	9
Diseases of the digestive system .. ..	760	52
Births .. ..	622	19
Injuries—general and local .. ..	468	13
Diseases of the respiratory system .. ..	446	73
Diseases of the circulatory system .. ..	426	226
Diseases of the nervous system .. ..	367	39
Mental diseases .. ..	304	4
Diseases of the genito-urinary system .. ..	291	39
Acute infectious diseases .. ..	242	47
Rheumatism .. ..	199	5
Diseases of skin and areolar tissue .. ..	190	9
Senile decay .. ..	164	98
Malignant diseases .. ..	161	119
Tuberculosis .. ..	115	38
Influenza .. ..	21	—
Venereal diseases .. ..	11	1
Diseases of remaining groups .. ..	363	43
No disease .. ..	145	—
Totals .. ..	6,211	834

*Mental Patients.*

	Male.	Female.	Total.
Number remaining in wards on 31st December, 1934 ..	—	1	1
Number of admissions during the year .. ..	103	177	280
Number of discharges to wards (not certified) .. ..	37	48	85
Number of discharges, care of friends (not certified) ..	3	3	6
Number transferred to mental hospitals .. ..	58	122	180
Number died .. ..	3	2	5
Number remaining in wards on 31st December, 1934 ..	2	2	4

*Analysis of Admissions of Mental Patients.*

	Male.	Female.	Total.
Placed under order by Medical Superintendent .. ..	25	59	84
„ „ relieving officers (Willesden) .. ..	7	26	33
„ „ relieving officers (Hendon) .. ..	40	70	110
„ „ relieving officers (W. Middlesex) .. ..	3	—	3
„ „ justices or police .. ..	28	22	50
Total .. ..	103	177	280



## WORK OF THE SPECIAL DEPARTMENTS.

1.	Surgical	..	..	..	Major operations	..	..	..	..	505	
					Minor operations	..	..	..	..	1,621	
											2,126
2.	Anæsthetics	..	..	..	General	..	..	..	..	863	
					Local	..	..	..	..	373	
					Spinal	..	..	..	..	97	
					Evipan	..	..	..	..	15	
											1,348
3.	Dental	..	..	..	Extractions	..	..	..	..	..	284
					Dentures and repairs	..	..	..	..	..	36
4.	Radiological	..	..	..	Investigations	..	..	..	..	..	3,352
					Radiograms	..	..	..	..	..	7,591
5.	Massage	..	..	..	Patients treated	..	..	..	..	..	297
					Treatments	..	..	..	..	..	9,430
6.	Electrical treatment	..	..	..	Patients treated	..	..	..	..	..	344
					Attendances	..	..	..	..	..	5,391
					Treatments	..	..	..	..	..	10,871
7.	Maternity	..	..	..	Women examined at ante-natal clinic	..	..	..	..	..	616
					Attendances at ante-natal clinic	..	..	..	..	..	2,455
					Deliveries	..	..	..	..	..	620
					Obstetric operations	..	..	..	..	..	89
8.	Pathological	..	..	..	Investigations (otherwise than in hospital)	..	..	..	..	..	3,225
9.	Out-patients	..	..	..	Number of patients seen	..	..	..	..	..	1,678
					Number of attendances	..	..	..	..	..	4,575
					Number who had received in-patient treatment previously						188
					Number who were subsequently admitted for in-patient treatment	..	..	..	..	..	14
10.	Nurses sick room-admissions	..	..	..	..	..	..	..	..	..	92

## 1. Department of Surgery.

## ANALYSIS OF OPERATIONS PERFORMED DURING THE YEAR.

On skull, spine and brain	..	..	..	..	..	..	7
On sympathetic nervous system	..			..	..	..	10
On abdomen and its contents	.	..	..	..	..	..	347
On genito-urinary organs	..	..	..	..	..	..	138
On bones and joints	..	..	..	..	..	..	71
On muscles, tendons and bursæ	..	..	..	..	..	..	11
Amputations	..	..	..	..	..	..	11
On arteries	..	..	..	..	..	..	2
On thorax and its contents	..	..	..	..	..	..	68
On ear, nose and throat	..	..	..	..	..	..	112
On female generative organs (gynæcological)				..	..	..	195
„ „ (obstetrical)				..	..	..	89
Miscellaneous (excluding 26 dental extractions in Theatre)	..						562
Total	..	..	..	..	..	..	1,623

The following figures relate to operations of interest or those most commonly performed during the year.

*On skull, spine and nervous system (17)*

Trephining .. .. .	2
Laminectomy .. .. .	1
Sympathetic nervous system .. .. .	10

*On abdomen and its contents (347)*

Partial gastrectomy .. .. .	1
Gastrostomy .. .. .	2
Gastro-enterostomy .. .. .	5
Peptic ulcer (perforated) .. .. .	16
Cholecystotomy, cholecystectomy .. .. .	14
Appendicectomy .. .. .	136
Appendicectomy (with drainage) .. .. .	54
Enterostomy, colostomy with/without resections .. .. .	17
For intestinal obstruction .. .. .	13
Herniotomy (16 strangulated) .. .. .	41
Miscellaneous group (exploratory or for peritonitis, abscess, &c.)	48

*On kidney, ureter and bladder (118)*

Cystoscopy .. .. .	80
Cystoscopy and ureteric catheterisation .. .. .	22
Suprapubic cystotomy and cystectomy .. .. .	11
Nephrotomy, nephrectomy .. .. .	5

*On male generative organs (20)*

Suprapubic prostatectomy .. .. .	3
Circumcisions .. .. .	15

*On female generative organs (195)*

Hysterectomy .. .. .	11
For retroversion .. .. .	3
On tube and/or ovary .. .. .	14
For ectopic gestation .. .. .	3
Curettage, uterine evacuation .. .. .	121
Plastic operations on vagina .. .. .	1

*On ear, nose and throat (112)*

Mastoidectomy .. .. .	36
Tonsillectomy .. .. .	44
Thyroidectomy .. .. .	3
Laryngoscopy .. .. .	12

*Miscellaneous group (632)*

Resection of rib .. .. .	19
Chest aspirations .. .. .	49
Skin grafts .. .. .	11
Blood transfusions .. .. .	14
Minor rectal operations .. .. .	61
Excision cysts .. .. .	10
Drainage of abscesses, &c. .. .. .	468

Analysis of Fractures and Dislocations treated to a conclusion during the year, together with the results of treatment.

Bone or Joint.	Result.			Total.
	Good.	Medium.	Died.	
Skull .. .. .	8	2	2	12
„ with concussion .. .. .	5	2	2	9
Vertebrae .. .. .	4	1	1	6
Ribs .. .. .	7	2	1	10
Clavicle .. .. .	7	4	—	11
Scapula .. .. .	1	—	—	1
Humerus .. .. .	18	3	1	22
Radius or ulna or both .. .. .	11	6	2	19
Carpus, metacarpus or phalanges .. .. .	6	—	—	6
Pelvis .. .. .	7	1	2	10
Femur .. .. .	19	7	5	31
Patella .. .. .	7	1	—	8
Tibia .. .. .	8	4	1	13
Fibula .. .. .	9	1	—	10
Tibia and fibula, simple or compound .. .. .	8	5	2	15
Tarsus, metatarsus or phalanges .. .. .	1	—	—	1
Multiple bony injuries, simple or compound .. .. .	6	2	—	8
Fracture-dislocations, various ; dislocations, various.. .. .	7	4	—	11
Fractures due to disease, ununited fractures, etc. .. .. .	—	1	—	1
Separated epiphyses .. .. .	1	—	—	1
Totals .. .. .	140	46	19	205

Male fracture cases .. .. .	120
Female fracture cases .. .. .	85
Total .. .. .	205

2. Department of Anæsthetics.

Analysis of Anæsthetics administered during the Year.

General.

Anæsthesia by chloroform, ether or mixture .. .. .	785
„ nitrous oxide .. .. .	77
„ ethyl chloride .. .. .	1
	863

Intravenous.

Evipan (General) .. .. .	15
--------------------------	----

Local.

Anæsthesia by application to mucous membrane .. .. .	12
„ freezing with ethyl chloride .. .. .	53
„ infiltration .. .. .	294
„ dental .. .. .	14
	373

Spinal.

Anæsthesia by intrathecal injection .. .. .	94
„ sacral .. .. .	3
	97
Total.. .. .	1,348







Table showing the method of delivery of the 626 babies born in the Department.

Method of Delivery.	Number of Births.	Deaths.		
		Maternal.	Foetal.	Neo-natal.
Natural forces .. .. .	557	1	13	14
Forceps .. .. .	41	2	6	4
Cæsarean section.. .. .	8	1	1	—
Craniotomy .. .. .	1	—	1	—
Breech .. .. .	19	—	—	—
Total .. .. .	626	4	21	18

Tubal inductions .. .. .	4
Delivered by midwives .. .. .	564
Delivered by medical officers .. .. .	56
Midwife sought medical assistance in .. .. .	34

Labour—									Per cent.
Normal	..	..	..	..	..	..	..	558	90·00
Abnormal	..	.. <sup>2 13</sup>	..	..	..	..	.. <sup>10 15</sup>	56	9·03
Multiple	..	..	..	..	..	..	..	6	·97
Total..								620	100·00

Birth—											
Full-time	..	..	..	..	..	..	..	..	551	88·02	
Premature	..	..	..	..	..	..	..	..	54	8·63	
Stillborn	..	..	..	..	..	..	..	..	21	3·35	
Total..									626	100·00	

Average weight at birth—ante-natal clinic infants .. .. .	7 lbs. 8 ozs.
” ” ” —other infants .. .. .	7 lbs.
Infants not entirely breast fed .. .. .	19.
Anæsthetics given for obstetric purposes .. .. .	102.
Average length in days of lying-in period .. .. .	11 days.

Obstetrical Operations (89).

Cæsarean sections .. .. .	8
Podalic and cephalic versions .. .. .	21
Induction of labour .. .. .	4
Manual removal of placenta .. .. .	8
Forceps deliveries .. .. .	41
Placenta prævia .. .. .	1
Episiotomy .. .. .	6

Maternal Morbidity.

All fatal cases and all cases in which a temperature of 100·4° F. or more is sustained for a period of 24 hours or recurs during that period. (Ministry of Health standard.)

	Ante-natal clinic.	Non-ante-natal clinic.	Total.
Deliveries (no deaths undelivered) .. .. .	549	71	620
Pyrexial cases .. .. .	2	11	13
Deaths .. .. .	2	2	4
Pyrexial cases and deaths .. .. .	4	13	17
Morbidity per cent. .. .. .	·64	2·09	2·73



Pyrexial Cases.

	Mode of Delivery.	Maternal Complications.	Number of cases.	
			Ante-natal clinic.	Non-ante-natal clinic.
Live births				
2	Natural forces .. ..	Retained membrane .. ..	2	—
1	„ .. ..	Pyelitis .. ..	1	—
6	„ .. ..	Nil .. ..	5	1
1	„ .. ..	Contracted pelvis, previous Cæsarean section .. ..	1	—
1	„ .. ..	Contracted pelvis, tubal induction .. ..	1	—
1	„ (breech) .. ..	Premature labour .. ..	1	—
Still-birth	Forceps .. ..	Albuminuria of pregnancy, persistent occipito posterior.		
1		Septicæmia .. ..	—	1
Total pyrexial cases .. ..			13	

Maternal Deaths (4).

	Mode of Delivery.	Maternal complication.	Number of cases.	
			Ante-natal clinic.	Non-ante-natal clinic.
Live-births				
1	Cæsarean section .. ..	Contracted pelvis, previous Cæsarean section .. ..	1	—
1	Natural forces .. ..	Precipitate labour, post-partum hæmorrhage .. ..	1	—
Still-births				
1	Forceps .. ..	Albuminuria of pregnancy, septicæmia, persistent occipito-posterior .. ..	—	1
1	„ .. ..	Obstructed labour due to persistent occipito-posterior ..	—	1

Total maternal deaths .. ..	4
Maternal mortality all cases.. ..	0·6 per cent.
Infant mortality—	Per cent.
Infants—born and survived .. ..	587 93·76
Infants—stillborn .. ..	21 3·36
Infants—born and died .. ..	18 2·88
Total births .. ..	626 100

Infant mortality—  
6·24 per cent. of all infants born.  
2·98 per cent. of all infants born alive.

Stillbirths.

Details of the 21 Stillbirths.

No. of Infants.	Method of Delivery.		Mother.		Infant.	
			Prima- para.	Multi- para.	Full Term.	Prema- ture.
13	Natural Forces	... Prematurity ... .. Toxæmia due to eclampsia ... .. Atelectasis ... .. Toxæmia of pregnancy ... .. Macerated foetus, ? cause ... .. Toxæmia due to maternal chronic nephritis Breech ... .. Monster ... .. Transverse presentation prolapsed cord Ante-partum hæmorrhage cord many times round neck	1 1 1 — — — — — — 1 1	1 1 1 1 1 1 1 1 1 —	— 1 M. 2 1 M. 1 M. — 1 — 1 M. —	2 M. 1 M. — — — 1 — 1 M. — — —
6	Forceps	... .. Prolapse of cord due to persistent occipito posterior Abdominal presentation following ex- ternal version Intra-uterine asphyxia due to cord round neck Toxæmia of pregnancy ... .. Maternal pyrexia ... ..	1 — 1 2 1 1	— — — — — —	1 — 1 M. 2 1 1	— — — — — —
1	Forceps craniotomy	... Intra-uterine pressure due to obstructed labour	—	1	1	—
1	Cæsarean section	... Rupture of uterus through old Cæsarean scar	—	1	1	—
21			10	11	16	5

M. Denotes macerated foetus.

Neo-Natal Deaths.

Details of the 17 Neo-Natal Deaths (within 4 weeks of birth).

No. of Infants.	Method of Delivery.	Maternal Complications.	Cause of Death.	Weight at Birth.	Age.
				lbs. ozs.	
1	Natural forces	... None ... ..	Atelectasis ... ..	6 5	6 hours.
1	„	... „ ... ..	Persistent occipito posterior. Intracranial hæmorrhage	9 8	1½ days.
1	„	... „ ... ..	Prematurity ... ..	7 5	6 days.
1	„	... „ ... ..	„ ... ..	3 10	3 days.
1	Forceps	... „ ... ..	Asphyxia neonatorum. Forceps delivery. Cerebral com- pression	7 4	1½ days.
2	Natural forces	... Chronic renal toxæmia of pregnancy	Prematurity ... ..	0 14	2½ days.
1	„	... None ... ..	Atelectasis ... ..	8 3	4 hours.
1	„	... „ ... ..	Spina bifida ... ..	5 7	4½ days.
1	„	... Accidental hæmorrhage	Congenital atelectasis	6 12	2 days.
1	„	... None ... ..	Atelectasis ... ..	8 9	8 hours.
1	„	... „ ... ..	Prematurity ... ..	2 11	½ hour.
1	Forceps	... Ante-partum hæmorrhage	„ ... ..	5 2	1½ days.
1	Natural forces	... „ ... ..	„ ... ..	3 3	6 days.
1	„	... None ... ..	Congenital atelectasis	6 12	2 days.
1	Forceps	... Prolonged first stage	Intracranial hæmorrhage	7 1	9½ hours.
1	„	... Toxæmia of pregnancy	Tear of tentorium cerebelli	6 12	4 hours.
1	Natural forces	... None ... ..	Prematurity ... ..	4 7	17 hours.

Average weight at birth.. .. 5 lbs. 15 oz.

*Neo-Natal Deaths.*

*Analysis of Cases of Normal and Abnormal Pregnancy, Parturition and Puerperium treated to a conclusion in Maternity and other Wards during the year.*

	Deaths.	Total.
Pregnancy .. .. .	—	27
Pregnancy and spurious labour pains .. .. .	—	44
Abnormal condition of gravid uterus and ovum .. .. .	—	1
Ectopic gestation .. .. .	—	2
Pregnancy—and concomitant disease .. .. .	—	25
Abortion—threatened .. .. .	—	32
„ complete .. .. .	—	33
„ incomplete .. .. .	—	100
„ with local infection .. .. .	2	3
Labour—normal .. .. .	—	537
„ normal and toxæmia of pregnancy .. .. .	—	4
„ normal and concomitant disease .. .. .	1	16
„ abnormal .. .. .	2	57
„ abnormal and concomitant disease .. .. .	1	3
„ multiple .. .. .	—	6
Puerperium—normal .. .. .	—	16
„ and concomitant disease .. .. .	1	4
Retained products of conception .. .. .	—	11
Mental disorders associated with child-bearing .. .. .	—	4
Eclampsia .. .. .	1	4
Total .. .. .	8	929

*Maternal Morbidity of Cases of Abortion.*

Cases treated to a conclusion, 168.

Pyrexial cases .. .. .	2
Deaths .. .. .	2
Pyrexial cases and deaths .. .. .	4

Morbidity per cent. 1·19.





10. Nurses' Sick Room.

(Resident Female Nurses.)

Number of nurses at 31st December	..	..	..	..	241
Nurses off sick during the year	..	..	..	..	92
Nursing days lost	..	..	..	..	980
Average number of days lost per sick nurse	..	..	..	..	10·6
Average number of days lost per nurse on staff	..	..	..	..	2·6
Disability—					
Abdominal colic	..	..	..	..	5
Influenza	..	..	..	..	4
Tonsillitis	..	..	..	..	27
Septic finger, &c.	..	..	..	..	9
Miscellaneous	..	..	..	..	47
					—
					92
					—

Comparative Tables.

	1932.	1933.	1934.
Beds—average daily number occupied	757	726	782
Admissions—average daily number	12	14	17
Births	341	463	604
Discharges	4,400	5,042	6,211
Operations—major	456	629	505
„ minor	847	938	1,118
Anæsthetics	1,015	1,299	1,348
Radiological investigations	2,100	2,814	3,352
Massage treatments	8,337	7,668	9,430
Electro-therapeutic and sunlight treatments	506	5,748	10,871
Ante-natal clinic—women examined	391	511	616
„ attendances	894	1,672	2,455
Confinements	375	475	620
Mortality per 100 women bearing live children	·03	0·4	0·3
Mortality per cent. of all infants born in hospital	8·6	8·88	6·24
„ „ of infants born alive in hospital	2·5	4·75	2·98
Pathological investigations	1,749	3,115	3,225
Casualty and out-patient attendances	1,396	1,884	4,575

## APPENDIX IV.

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ANNUAL REPORT ON THE WORK OF THE WEST MIDDLESEX COUNTY HOSPITAL  
DURING 1934, PREPARED BY THE MEDICAL SUPERINTENDENT.

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## Staff.

## WHOLE-TIME MEDICAL STAFF.

*Medical Superintendent—*

J. B. Cook, M.D., Ch.B., D.P.H.

*Deputy Medical Superintendent—*

Miss M. W. Warren, M.R.C.S., L.R.C.P.

*Assistant Medical Officers—*

A. W. Badenoch, M.A., M.D., F.R.C.S.

G. Stephen, M.B., Ch.B.

M. M. Deane, M.D., M.R.C.P., D.P.M.

Miss I. M. Titcomb, B.M., B.Ch.

J. A. McLean, M.D., B.S., M.R.C.P.

*Pathologist—*

W. Broughton-Alcock, B.A., M.B., M.R.C.S., L.R.C.P.

## VISITING MEDICAL STAFF.

*Electro-therapist—*

C. A. Robinson, B.A., M.B., B.Ch., D.M.R.E.

*Radiologist—*

D. G. Arthur, M.R.C.S., L.R.C.P.

*Ophthalmic Surgeon—*

F. W. Law, M.A., M.D., F.R.C.S.

*Consulting Surgeon—*

L. E. C. Norbury, O.B.E., M.B., B.S., F.R.C.S.

*Consulting Physician—*

R. Travers Smith, B.A., M.B., F.R.C.P.

*Consulting Gynæcologist—*

J. W. Bell, L.R.C.P., L.R.C.S. and L.M.

*Consulting Aural Surgeon—*

L. Colledge, M.B., B.Ch., F.R.C.S.

## NURSING STAFF.

*Matron—*

Miss E. Huggins.

*Nurses—*

202 Resident and 17 Non-Resident.



## Classification of Accommodation.

--	Male.	Female.	Children.	Total.
Medical .. ..	108	133	—	241
Surgical .. ..	45	45	—	90
Children .. ..	—	—	119	119
Tuberculosis .. ..	16	17	—	33
Isolation .. ..	—	—	16	16
Maternity .. ..	—	31	—	31
Totals .. ..	169	226	135	530

## Statistical Tables for the year ended 31st December, 1934.

Remaining in hospital on 1st January, 1934 .. .. .	493	
Admitted during the year .. .. .	5,341	
Born in hospital .. .. .	703	
	<hr/>	6,537
Discharged .. .. .	5,417	
Died .. .. .	685	
Remaining in hospital on 31st December, 1934 .. .. .	435	
	<hr/>	6,537

Highest number of patients, 561—on 28th and 31st March, 1934.

Lowest number of patients, 390—on 11th November, 1934.

Daily average number during the year, 470.

## I.—TABLE SHOWING HOW THE 6,044 CASES WERE ORIGINALLY ADMITTED.

By order of relieving officer .. .. .	3,183
By Medical Superintendent .. .. .	2,017
Births .. .. .	703
Transfers from Middlesex County Council institutions or homes .. .. .	141
Total .. .. .	<hr/> 6,044 <hr/>

## II.—TABLE SHOWING THE DISTRICTS FROM WHICH THE 6,044 CASES WERE ADMITTED.

Acton .. .. .	651	Sunbury .. .. .	23
Brentford and Chiswick .. .. .	864	Teddington .. .. .	322
Ealing .. .. .	673	Twickenham .. .. .	630
Heston and Isleworth .. .. .	1,418	Other districts of Middlesex .. .. .	1,463
Total .. .. .	6,044.		

III.—TABLE SHOWING WHITHER THE 6,102 PATIENTS WERE DISCHARGED.

Home .. .. .	4,601
Middlesex County Council's institution or homes.. ..	452
Convalescent home .. .. .	94
Other authorities' hospitals and institutions .. .. .	33
Infectious diseases hospital .. .. .	25
Sanatoria .. .. .	61
Voluntary hospitals .. .. .	4
Died .. .. .	685
Duty (staff) .. .. .	147
Total .. .. .	6,102

DURATION OF STAY OF PATIENTS IN HOSPITAL.

Under four weeks .. .. .	4,280
4 weeks and under 13 weeks .. .. .	1,506
13 weeks or more .. .. .	316
	6,102

IV.—TABLE SHOWING AGE AND SEX DISTRIBUTION OF PATIENTS WHO DIED DURING THE YEAR

Ages.	Male.	Female.	Total.
Under 1 year .. .. .	54	42	96
1-5 years .. .. .	17	16	33
5-10 „ .. .. .	4	8	12
10-15 „ .. .. .	4	9	13
15-20 „ .. .. .	4	9	13
20-30 „ .. .. .	15	25	40
30-40 „ .. .. .	26	30	56
40-50 „ .. .. .	42	36	78
50-60 „ .. .. .	66	36	102
60-70 „ .. .. .	89	47	136
70-80 „ .. .. .	38	36	74
Over 80 „ .. .. .	15	17	32
Total .. .. .	374	311	685
Deaths within 24 hours of admission .. .. .			113
„ 48 „ .. .. .			42
„ 72 „ .. .. .			29
All other deaths .. .. .			501
Total .. .. .			685

V.—CLASSIFICATION OF DISEASES AND CONDITIONS FOR WHICH THE 6,102 PATIENTS WERE PRIMARILY TREATED.

Disease or Condition.	Children (under 16).			Males.			Females.			Total.
	Relieved.	Unrelieved.	Died.	Relieved.	Unrelieved.	Died.	Relieved.	Unrelieved.	Died.	
Acute infectious diseases ..	124	—	10	27	—	4	51	2	5	223
Influenza .. ..	1	—	—	5	—	—	16	—	—	22
Tuberculosis—										
Pulmonary .. ..	5	—	3	80	—	34	58	—	28	208
Non-pulmonary .. ..	14	—	12	8	—	2	9	—	4	49
Malignant disease .. ..	—	—	2	23	—	51	55	—	39	170
Rheumatism—										
Acute .. ..	18	—	2	22	—	—	30	—	2	74
Non-articular .. ..	3	—	—	11	—	—	27	—	—	41
Chronic arthritis ..	—	—	—	26	—	—	41	—	—	67
Abortion and miscarriage	—	—	—	—	—	—	175	—	3	178
Other conditions of pregnancy .. ..	—	—	—	—	—	—	112	—	4	116
Diseases of the—										
Eye .. ..	19	—	—	5	—	—	13	—	—	37
Ear .. ..	56	—	1	4	—	1	10	—	—	72
Tonsils and/or adenoids	64	—	—	3	—	—	10	—	—	77
Nervous system .. ..	29	—	9	23	—	4	47	—	1	113
Circulatory system ..	11	—	8	89	—	85	140	—	57	390
Blood, spleen and lymphatics .. ..	6	—	2	12	—	5	12	—	3	40
Respiratory system ..	149	—	38	181	—	44	154	—	21	587
Teeth and gums .. ..	7	—	—	2	—	—	5	—	—	14
Digestive system .. ..	129	—	28	296	—	25	349	—	16	843
Nutrition and metabolism	15	—	30	33	—	4	48	—	9	139
Diseases of the generative system .. ..	2	—	—	4	—	—	122	—	—	128
Diseases of the bone ..	5	—	—	11	—	—	12	—	—	28
Diseases of the skin and areolar tissue .. ..	95	—	—	90	—	4	119	—	—	308
Diseases of the urinary system .. ..	21	—	—	67	—	33	57	—	14	192
Malformation and cysts ..	3	—	5	2	—	—	1	—	—	11
Injuries .. ..	67	—	2	224	—	14	134	—	10	451
Poisonings .. ..	1	—	—	2	—	1	1	—	—	5
Mental diseases .. ..	—	2	—	—	—	—	—	8	—	10
Venereal diseases .. ..	—	—	—	—	6	—	—	1	—	7
Puerperal pyrexia .. ..	—	—	—	—	—	—	35	—	—	35
„ fever .. ..	—	—	—	—	—	—	24	—	6	30
Mothers and infants discharged from maternity wards .. ..	674	—	—	—	—	—	689	—	—	1,363
Infants with mothers ..	59	—	—	—	—	—	—	—	—	59
No disease .. ..	11	—	—	2	—	—	2	—	—	15
Totals .. ..	1,588	2	152	1,252	6	311	2,558	11	222	6,102



## 1. Department of Surgery.

## ANALYSIS OF OPERATIONS PERFORMED IN THE THEATRE DURING 1934.

Operations.	Major.	Minor.	Totals.
<i>On skin and superficial structures</i> (including toilet of wounds, incision and draining of abscesses, skin grafts, &c. . . . .)	1	387	388
<i>On bones, joints and tendons—</i>			
Reduction of fractures by manipulation . . . . .	22	23	45
Reduction of fractures by open operation . . . . .	20	—	20
Reduction of dislocation . . . . .	—	2	2
For osteomyelitis . . . . .	16	—	16
Amputations . . . . .	11	—	11
Miscellaneous . . . . .	10	93	103
<i>On head and neck—</i>			
Trephine of skull . . . . .	1	—	1
Partial thyroidectomy . . . . .	6	—	6
Dissection of glands of neck . . . . .	3	—	3
Miscellaneous . . . . .	4	7	11
<i>On Eye—</i>			
Enucleation/Evisceration . . . . .	5	—	5
Extraction of lens/needling . . . . .	6	1	7
Iridectomy . . . . .	3	3	6
Plastic operations . . . . .	4	—	4
<i>On Ear, Nose and Throat—</i>			
Mastoidectomy . . . . .	39	—	39
Removal of tonsils and adenoids . . . . .	11	75	86
<i>On Abdominal Walls and Cavity—</i>			
Herniotomy for inguinal/femoral hernia . . . . .	58	—	58
Herniotomy for ventral/umbilical hernia . . . . .	8	—	8
Laparotomy, exploratory, or for adhesiolysis, peritonitis, &c. . . . .	38	—	38
<i>On Stomach and Duodenum—</i>			
Partial gastrectomy . . . . .	1	—	1
Suture of perforated ulcer . . . . .	20	—	20
Gastrostomy . . . . .	2	—	2
Gastroenterostomy . . . . .	4	—	4
Rammstedt's operation . . . . .	1	—	1
<i>On Intestine, Biliary Passages, Rectum and Anus—</i>			
Appendicectomy without drainage . . . . .	141	—	141
Appendicectomy with drainage . . . . .	88	—	88
Drainage of appendix abscess . . . . .	2	—	2
Resection and/or anastomosis of small intestine . . . . .	7	—	7
Enterostomy/colostomy . . . . .	18	—	18
Sigmoidoscopy . . . . .	—	28	28
Cholecystectomy/cholecystostomy/cholecysto-gastrotomy . . . . .	25	—	25
Miscellaneous . . . . .	12	16	28
<i>On Spleen—</i>			
Splenectomy . . . . .	4	—	4
<i>On Urinary Tract—</i>			
Nephrectomy . . . . .	7	—	7
Nephrotomy/pyelotomy/ureterotomy . . . . .	9	—	9
Prostatectomy . . . . .	6	—	6
Cystotomy . . . . .	30	—	30
Cystoscopy . . . . .	—	64	64
Pyelography . . . . .	—	23	23
Miscellaneous . . . . .	4	18	22
<i>On Male Generative Organs—</i>			
Miscellaneous . . . . .	2	20	22

Operations.						Major.	Minor.	Total.
On Female Generative Organs—								
Total hysterectomy .. .. .						8	—	8
Sub-total hysterectomy .. .. .						2	—	2
Salpingectomy/oöphorectomy .. .. .						22	—	22
Curettage/evacuation of uterus .. .. .						70	—	70
Ventro-suspension .. .. .						3	—	3
Colporrhaphy/perineorrhaphy .. .. .						5	—	5
Miscellaneous .. .. .						3	—	3
On Breast—								
Removal of tumour .. .. .						3	—	3
Incision and drainage of abscess .. .. .						1	20	21
Miscellaneous .. .. .						23	6	29
Totals .. .. .						788	786	1,574

In addition to the above the theatre was used for minor operative procedures (e.g. dental extractions, intra-uterine injection of glycerine, douches, &c.) on 496 occasions.

Analysis of Fractures and Dislocations treated to a conclusion during the year, their nature, together with the results of treatment.

Bone or Joint.					Result of Treatment.							
					Simple.				Compound.			
Good.	Fair.	Poor.	Died.	Good.	Fair.	Poor.	Died.					
Skull—vault .. .. .	4	1	—	—	—	—	—	—				
„ base .. .. .	3	—	—	4	—	—	—	—				
„ bones of face .. .. .	1	2	—	—	—	—	—	—				
Concussion .. .. .	62	10	—	—	—	—	—	—				
Vertebræ .. .. .	3	2	—	—	—	—	—	—				
Ribs .. .. .	12	—	—	—	—	—	—	—				
Clavicle .. .. .	6	—	1	—	—	—	—	—				
Scapula .. .. .	2	—	—	—	—	—	—	—				
Humerus .. .. .	9	3	—	—	1	1	—	—				
Radius, ulna or both .. .. .	16	1	—	—	—	—	—	—				
Pelvis .. .. .	4	—	—	—	—	—	—	—				
Femur, neck or great trochanter .. .. .	14	1	—	1	—	—	—	—				
„ shaft or lower end .. .. .	15	3	2	2	1	—	—	—				
Patella .. .. .	2	—	—	—	—	—	—	—				
Tibia .. .. .	9	—	—	—	—	—	—	—				
Fibula .. .. .	2	—	—	—	—	—	—	—				
Tibia and fibula .. .. .	27	3	—	—	5	2	—	—				
Tarsus, metatarsus or phalanges .. .. .	3	—	—	—	1	—	—	—				
Fracture dislocations .. .. .	2	—	—	—	—	—	—	—				
Injury to soft parts .. .. .	29	5	1	1	31	3	—	1				
Ruptured abdominal organs .. .. .	1	—	—	2	—	—	—	—				
Multiple bony injuries .. .. .	9	4	—	2	7	3	—	3				
Dislocations—various .. .. .	7	—	—	—	—	—	—	—				
Totals .. .. .	242	35	4	12	46	9	—	4				

2. Anæsthetics.

*Analysis of anæsthetics administered during the year.*

Ether and oxygen	..	..	..	..	..	..	..	20
Chloroform and ether	..	..	..	..	..	..	..	85
Ethyl ehloride and ether	..	..	..	..	..	..	..	583
Nitrous oxide and oxygen	..	..	..	..	..	..	..	145
Nitrous oxide, oxygen and ether	..	..	..	..	..	..	..	35
Ethyl ehloride—ether-oxygen	..	..	..	..	..	..	..	24
Ether	..	..	..	..	..	..	..	76
Nitrous oxide	..	..	..	..	..	..	..	206
Spinal	..	..	..	..	..	..	..	17
Loeal	..	..	..	..	..	..	..	137
Total	..	..	..	..	..	..	..	1,328

3. Electrical Department.

Number of patients treated	..	..	..	..	..	..	936
Number of attendanees	..	..	..	..	..	..	15,560
Number of treatments	..	..	..	..	..	..	23,224

*Analysis of Treatments.*

Diathermy	..	..	..	..	..	..	..	3,487
Galvanism	..	..	..	..	..	..	..	3,674
Faradism	..	..	..	..	..	..	..	347
Sinusoidal alternating current	..	..	..	..	..	..	..	1,192
Radiant heat	..	..	..	..	..	..	..	1,234
Ultra-violet light	..	..	..	..	..	..	..	7,380
Examinations	..	..	..	..	..	..	..	2,350
Dressings	..	..	..	..	..	..	..	3,560
Total	..	..	..	..	..	..	..	23,224

*Chronic Arthritis.*

For some years Dr. Robinson has been investigating the eauses and treatment of this condition. Work begun by him at this Hospital in 1921 has demonstrated that there are two types of ehronic arthritis ; one produced by a focus of infection somewhere in the body, the other being the result of senile ehanges.

TYPE 1.—*Infective Arthritis.*

This eondition, which is aecompanied by ill-health and pains in the joints, tends to result in their fixation and deformity. Dr. Robinson has shown that in women an infection of the eervix is the focus responsible for the arthritis in the majority of cases. The onset of joint symptoms is usually preeeded by ill-health and baekache, often dating baek to a confinement or misearriage. The assoeiation of baekache and eervieitis has come to be regarded as a forerunner of arthritis, and treatment of the eervieitis is undertaken in this Hospital with the deliberate objeet of preventing the onset of joint symptoms.

The foregoing theory of the eauses of this type of joint affection explains the faet that in women the onset usually oeours during the ehild-bearing period and is rare in old age, and also why this type of arthritis is more eommon in women than in men.

In the male this type of joint affection oeours at all ages beeause the focus of infection is usually in the prostate which is liable to infeetion at all times of life.

In the treatment of this eondition the eradieation of the eervieal or prostatic infeetion by diathermy results in improvement of the patient's general health followed by subsidence of the joint inflammation.

Early treatment is required if the best results are to be obtained, but even advaneed eases can oeasionally be considerably relieved. Re-growth of eartilage has been observed in some of these eases.

After the infeetion has been cleared up the joints must be gradually mobilised and patients eneouraged as soon as possible to move their limbs.

TYPE 2.—*Decrescent Arthritis.*

When due to senile ehanges little can be done for this eondition but a speeial premature phase of it oeours in women at the menopause Heating the ovaries by intra-pelvie diathermy shortens the menopause and arrests this form of arthritis in an early stage.

Some of these eases of arthritis have been most dramatie cures. Patients who have been bed-ridden for months, or only able to get about on crutehes, have time after time been cured and walked out of the Hospital unaided.



## 4. Department of Radiology.

*Number of patients—*

In-patients	..	..	..	..	..	..	2,187
Out-patients	..	..	..	..	..	..	214
Total	..	..	..	..	..	..	2,401

*Number of radiograms—*

In-patients	..	..	..	..	..	..	4,858
Out-patients	..	..	..	..	..	..	298
Total	..	..	..	..	..	..	5,156

*Number of treatments—*

In-patients	..	..	..	..	..	..	261
Out-patients	..	..	..	..	..	..	156
Total	..	..	..	..	..	..	417

*Analysis of investigations made during the year 1934.*

	Appearances.		
	Normal.	Abnormal.	Total.
Skull and contents .. .. .	98	35	133
Lungs and mediastinum .. .. .	33	487	520
Pleura and pleural conditions .. .. .	3	56	59
Heart and aorta .. .. .	—	9	9
Lipiodol injections .. .. .	4	22	26
Barium meal .. .. .	33	102	135
Barium enema .. .. .	11	32	43
Biliary tract—			
(a) With shadocol .. .. .	12	4	16
(b) Without shadocol .. .. .	10	19	29
Urinary system .. .. .	82	52	134
Pyelograms .. .. .	27	43	70
Bones and joints—			
(a) For disease .. .. .	60	248	308
(b) For deformity .. .. .	173	598	771
Generative system .. .. .	46	45	91
Foreign bodies .. .. .	—	8	8
Teeth .. .. .	7	3	10
Total .. .. .	599	1,763	2,362

5. Massage Department.

PATIENTS.

	Medical.	Surgical.	Total.
West Middlesex County Hospital .. .. .	137	755	892
Warkworth House .. .. .	40	7	47
Out-patients .. .. .	105	138	243
Total .. .. .	282	900	1,182

TREATMENTS.

	Medical.	Surgical.	Total.
West Middlesex County Hospital .. .. .	4,796	8,438	13,234
Warkworth House .. .. .	1,051	180	1,231
Out-patients .. .. .	1,306	2,224	3,530
Total .. .. .	7,153	10,842	17,995

6. Queen Mary Maternity Wing.

Ante-natal clinic.

Number of sessions .. .. .	281
Number of new cases .. .. .	832
Number of attendances .. .. .	5,596
Average number of attendances per session .. .. .	19·9
Average number of attendances per patient .. .. .	6·7
Number of patients needing special treatment .. .. .	568

Admissions.

	Cases.	Per cent.
Undelivered .. .. .	725	98·6
Born before admission .. .. .	10	1·4
Total.. .. .	735	100

Via ante-natal clinic .. .. .	654	89
Not via ante-natal clinic .. .. .	81	11
Total.. .. .	735	100

Married .. .. .	669	91
Unmarried .. .. .	66	9
Total.. .. .	735	100

Parous State.

Primiparæ .. .. .	410	56
Multiparæ .. .. .	325	44
Total.. .. .	735	100

Presentation.

Vertex .. .. .	683
Face .. .. .	3
Breech, Simple .. .. .	35
„ Complex .. .. .	8
Transverse .. .. .	3
Total.. .. .	732

Born before admission .. .. .	10
Twins .. .. .	14

7 sets.

Table showing the method of delivery of the babies born in the Department.

Method of Delivery.	No.	Deaths.		
		Maternal.	Fœtal.	Neo-natal.
Natural forces .. .. .	680	4	25	17
Forceps .. .. .	22	1	4	1
Version .. .. .	17	—	10	1
Cæsarean section .. .. .	13	1	—	—
Born before admission .. .. .	10	—	—	—
Total .. .. .	742	6	39	19

Medicinal inductions .. .. . 69

Surgical inductions .. .. . 15

Delivered by midwives .. .. . Cases. 691  
 Delivered by medical officers .. .. . 41  
 Born before admission .. .. . 10

Total .. .. . 742

*Labour.*

Normal, single .. .. . 666  
 „ multiple .. .. . 14 (7 sets twins)  
 Abnormal .. .. . 52  
 Born before admission .. .. . 10  
 Total .. .. . 742

*Birth.*

Full time .. .. . 625  
 Premature .. .. . 75  
 Post-mature .. .. . 3  
 Stillborn .. .. . 39  
 Total .. .. . 742

Infants not entirely breast fed .. .. . 52  
 Average duration of stay in hospital .. .. . 14 days.

## MATERNAL DEATHS.

Delivery.	Complications.	Clinic.	Non-Clinic.	Infant.
Normal .. .. .	Bilateral lobar pneumonia .. .. .	1	—	Premature, alive.
Normal .. .. .	Pulmonary embolus .. .. .	1	—	Normal.
Normal .. .. .	Failed forceps before admission to hospital. Sepsis	—	1	Stillborn.
Perforation, for- ceps	Failed forceps before admission to hospital. Collapse	—	1	Stillborn.
Normal .. .. .	Lobar pneumonia .. .. .	—	1	Normal.
Cæsarean section .. .. .	Spreading thrombosis of legs. Sepsis.	—	1	Normal.
	Totals .. .. .	2	4	



Neo-Natal Deaths.  
19 cases.

No. of Infants.	Method of Delivery.	Maternal Complication.	Cause of Death.	Age.
5	Normal ... ..	—	Prematurity ... ..	12 hours—4 days.
1	„ ... ..	Pneumonia ... ..	„ ... ..	1 day.
1	„ ... ..	Twins ... ..	„ ... ..	6 days.
1	„ ... ..	—	Mild hydro-cephalus ... ..	5 days.
1	„ ... ..	Long labour—pyelitis ... ..	„ ... ..	14 hours.
1	Forceps ... ..	—	Prematurity ... ..	3 hours.
1	Normal ... ..	Pulmonary tuberculosis ... ..	„ ... ..	2 days.
1	„ ... ..	Severe rheumatic carditis ... ..	„ ... ..	1 day.
3	„ ... ..	Precipitate labour ... ..	Intra-cranial hæmorrhage ... ..	1 hour—2 days.
1	„ ... ..	—	Atresia of bowel ... ..	7 days.
1	„ ... ..	—	Patent ductus arteriosus ... ..	2 days.
1	„ ... ..	—	Congenital deficiency of bile ducts	5 days.
1	Willetts forceps ... ..	Placenta prævia ... ..	Prematurity ... ..	1 day.

Details of 39 Still-births.

No. of Infants.	Complications and Cause of Death.	Full Term.	Premature.	Post-mature.
5	Placenta prævia ... ..	2	3	—
2	Disproportion, P.O.P., &c. ... ..	1	1	—
6	Abnormal foetus—			
	(a) Congenital heart disease ... ..	1	—	—
	(b) Meningocele ... ..	1	—	—
	(c) Hydrocephalus ... ..	2	1	—
	(d) Anencephalus ... ..	—	1	—
10	Toxæmia of pregnancy ... ..	3	7	—
3	Cord, long, prolapsed ... ..	3	—	—
3	Breech ... ..	2	1	—
1	Twins ... ..	—	1	—
4	Macerated foetus, ? cause ... ..	—	3	1
3	Shoulder presentation ... ..	1	2	—
1	Mother with pneumonia... ..	—	1	—
1	Accident to mother with secondary anæmia ... ..	1	—	—
	Totals ... ..	17	21	1

Pyrexia in the Puerperium—35 cases.

No. of Cases.	Complication.	Clinic.	Non-Clinic.
2	Lacerations, &c. .. ..	4	1
8	Mastitis .. ..	8	—
6	Pyelitis .. ..	3	3
2	Prolonged labour .. ..	2	1
2	Cæsarean section .. ..	2	—
3	Toxæmia .. ..	2	1
1	Rheumatism and pyelitis .. ..	1	—
1	Anæmia .. ..	1	—
1	Lymphosarcoma .. ..	1	—
1	Lobar pneumonia.. ..	—	1
1	Unknown .. ..	1	—
1	Twins, retained membranes .. ..	1	—
1	Retained placenta, manual removal .. ..	—	1
1	Macerated foetus .. ..	1	—
	Totals .. ..	27	8

## 7. Pathological Department.

ANALYSIS OF INVESTIGATIONS, MAY TO DECEMBER, 1934.

*Nature of Specimen.*

Swabs from ear, nose and throat for K.L.B.	..	..	..	382
„ from various sources for other organisms	..	..	..	51
Sputa for b. tuberculosis	..	..	..	287
Blood, hæmoglobin, total and differential counts	..	..	..	118
„ total counts only	..	..	..	1
„ differential count only	..	..	..	10
„ sugar estimation	..	..	..	48
„ Vanden Bergh reaction	..	..	..	10
„ culture	..	..	..	13
„ agglutination test (7 micro-organisms)	..	..	..	8
„ urea estimation	..	..	..	77
Blood-urea. Urea concentration factor	..	..	..	23
Urine, urea concentration test	..	..	..	36
„ bacteriological and microscopical, catheter specimens	..	..	..	305
„ sugar	..	..	..	41
C.S.F., complete examination, chemical and bacteriological	..	..	..	34
Other body fluids for bacteriological examination	..	..	..	27
Discharges for presence of gonococci	..	..	..	104
„ „ „ other organisms	..	..	..	21
Fæces, bacteriological and microscopical	..	..	..	10
„ chemical examination	..	..	..	25
Pus for bacteriological examination	..	..	..	71
Hairs and scales for presence of fungi	..	..	..	4
Urine, diastase	..	..	..	1
„ bile	..	..	..	1
Vomit, occult blood and bile	..	..	..	2
Blood, presence of malarial parasites	..	..	..	8
„ takata, air reaction	..	..	..	3
„ fragility test	..	..	..	1
„ coagulation time	..	..	..	2
„ bleeding time	..	..	..	2
„ platelet count	..	..	..	4
Tissues for section	..	..	..	187
Fractional test meals (gastric analysis)	..	..	..	30
Animal experiments	..	..	..	3
Total..	..	..	..	1,950

APPENDIX V.

ANNUAL REPORT ON THE WORK OF HILLINGDON COUNTY HOSPITAL DURING  
1934, PREPARED BY THE MEDICAL SUPERINTENDENT.

Staff.

WHOLE-TIME MEDICAL STAFF.

*Medical Superintendent—*

W. Arklay Steel, M.D., Ch.B., M.R.C.P.

*Deputy Medical Superintendent :—*

L. Fatti, M.B., B.S., F.R.C.S.

*Assistant Medical Officer—*

Miss J. Morgan, M.D., B.S., M.C.O.G.

*One vacancy.*

VISITING MEDICAL STAFF.

*Radiologist—*

G. Simon, M.B., B.Chir., D.M.R.E.

*Pathologist—*

W. Broughton-Alcock, B.A., M.B., M.R.C.S., L.R.C.P.

NURSING (69)—

*Matron—*Miss E. S. Laing.

Administrative Sisters .. ..	4	Nurses and probationers ..	55
Departmental Sisters .. ..	2	Massage Sister .. ..	1
Ward Sisters .. ..	6		

OTHER STAFF.

(Non-Resident).

Chaplain .. ..	Rev. W. G. Prior.
Steward .. ..	<i>Vacant.</i>
Pharmacist .. ..	Mr. D. F. B. Pritchard, B.Sc., M.P.S.
Radiographer .. ..	Mr. C. Butler, M.S.R.

Throughout the year several changes in the medical staff have taken place. Mr. R. Rutherford, F.R.C.S., relinquished his appointment as Medical Superintendent on 15th May. Mr. Rutherford was appointed in 1930, and during his short tenure of office he was responsible for many of the remarkable improvements which have been brought about. Great credit is due to him for the way he developed the Hospital and for the energy he devoted in raising the clinical standard of the work. Dr. W. Arklay Steel was appointed Medical Superintendent and commenced duty on 16th May. Dr. J. H. Follows resigned his appointment as Assistant Medical Officer on 24th May. This vacancy has been filled by temporary appointments since then, but a permanent appointment of physician will shortly be made. Dr. G. Simon was appointed visiting Radiologist in September and Dr. Broughton-Alcock visiting Pathologist in November. Mr. A. Scrivens died on 11th September, 1934. He was appointed Master in August, 1924, and Steward in June, 1931. The news of his death was received with sincere regret by all members of the staff, with whom he was very popular. Mr. Scrivens had shown himself to be a very loyal officer and there is no doubt he held the interests and welfare of the hospital and staff very much at heart. Mr. C. Abel has been Acting Steward in the interim.

Plan of Report.

In the compilation of this report, the general scheme and outlines of the Redhill County Hospital Annual Report have been adopted almost in entirety. Many years' familiarity with the work, care and consideration given to its formation and detail, the classification of diseases and of operations and the work of each department, suggests the warranty for its adoption as a model report for a general hospital of this type. Its merit and success lie in the accuracy of its detail and minutiae, without which statistics and their possibilities in comparison are valueless. As a standard, it may form an index of the amount of work done at this hospital, the smallest and youngest in the County, an index which in the course of time may raise the hospital from its cradle of infancy to a prominence in the hospital service.



**Beds.**

Many structural changes and improvements have been effected during the last two years to meet the increasing demand for beds. In consequence, alterations in the allocation of beds have to be noted and the complement is revised as follows :—

Male—Medical	..	..	..	..	..	..	17	
„ Surgical	..	..	..	..	..	..	32	
							—	49
Female—Medical	..	..	..	..	..	..	17	
„ Surgical	..	..	..	..	..	..	33	
							—	50
Maternity beds	..	..	..	..	..	..	12	
„ cradles	..	..	..	..	..	..	12	
„ isolation bed	..	..	..	..	..	..	1	
							—	25
Children under 7—main ward	..	..	..	..	..	..	12	
„ „ side ward	..	..	..	..	..	..	5	
							—	17
Total							..	141

The accommodation is now taxed to its absolute limit. No cases in our own district and comparatively few in other districts have been refused admission, and for varying periods of the year 1934 the complement of beds has been exceeded in almost every department.

**Nurses' Training School.**

When the hospital was first opened it was affiliated for training purposes to St. Alfege's Hospital, Greenwich. In September, 1931, it was approved by the General Nursing Council as a complete training school for nurses, but it was not until 1933 that the training school was completely organized. This accounts for the relatively few candidates presented by this hospital for the County and State Final Examinations.

**Academic Successes during the Year.**

						Passed.	Failed.
State Examination—Preliminary	..	..	..	..	..	14	—
„ „ Final	..	..	..	..	..	1	1
County Nurses Examination	..	..	..	..	..	4	2

**Structural Developments.**

The building of additional wings to the Nurses' Home has been completed. The extension was formally opened by County Councillor Mrs. K. Lovibond, O.B.E., the Chairman of the Southern House Committee, on 16th November, 1934. The new home provides bedroom accommodation for 106 nurses and domestic staff. It is equipped and furnished in a way which has realised Mrs. Lovibond's declared intention of providing the warmth and attraction of home; and its amenities have added much to the comfort and happiness of the nurses in residence. Further extensions will be built when requirements for increased accommodation warrant the addition.

The building previously used as the nursery has been adapted as an administrative block. The upper floor of this building is used as the dispensary, dispensary stores and pathological laboratory, while on the ground floor rooms are set aside for the X-ray and massage departments, medical superintendent's office and general office. With this adaptation it has been made possible to increase the accommodation for sick children and also to provide an anæsthetic room in the theatre block. Although making an improvement on previous existing departments, it is by no means satisfactory and leaves much to be desired.

In an endeavour to cope with the increased work, the building previously used for isolation purposes has been adapted for use as an out-patient department. This adaptation, though meeting the immediate requirements, must be regarded as a temporary expedient, for it is neither conveniently situated nor sufficiently commodious to facilitate the work of a department which is rapidly becoming busier.

When the available bed accommodation is considered, the increase of work in this hospital is truly remarkable and fully proves the wisdom of the foresight shown by the Committee in making provision for the building of additional extensions in the near future.

### Work of the Hospital.

The work of the various departments is shown in detail in the statistical tables which form the main part of this report.

Changes of administrative methods, alterations in classifications and other changes, effected as they have been in the middle of a year, have tended to show apparent reductions in some of the figures set out in the comparative tables for the past three years. These reductions should be attributed to the change of methods and in no way should be regarded as minimising the work in the past year. It is anticipated that the figures shown at the end of 1935 will serve as a better criterion in comparison, illustrating a true increase in the work and accounting substantially for the apparent reductions in the 1934 figures. An increasing number of acute cases, owing to the embarrassment for beds on the hospital side, have perforce been accommodated in the infirmary block. A record is being kept of these cases and their number will be indicated in the report for 1935. The increasing number provides a further argument for the provision of extra wards in the Hospital.

The number of cases treated to a conclusion shows a slight increase, although the average number of patients per occupied bed shows a definite reduction. The average daily number of beds occupied at 130.9 shows a substantial increase. The average daily percentage of available beds occupied is 92.1. The average daily percentage of patients on the dangerously ill list is 6.5. The average length of stay per patient (17.8) shows an increase of 2.7. This figure must be subject to fluctuation dependent on the type and the number of any type of case admitted, but even at 17.8 it represents a very rapid turnover and indicates the acute nature of the cases treated. The death-rate of all cases treated is 7.2 per cent.

#### SPECIAL DEPARTMENTS.

Certain changes in some of the special departments have been made. Notice of some of these is taken in the observations made below.

##### *Surgery.*

Comparative figures show a decrease in the number of both major and minor operations for the year. This, to a large extent, is due to the stricter classification of all operations and procedures which have been performed throughout the year. During the year 1,711 anaesthetics were administered and of these 1,205 were general and 140 spinal. Evipan was administered in 202 cases and has proved a very useful anaesthetic. Its main disadvantage would appear to be its high cost.

##### *Radiological Department.*

It was found that the apparatus used in this department was obsolete, unsafe for continued use and, therefore, was dangerous to the operators. This has now been replaced by a new apparatus which fully protects the operator and is electrically shock-proof. Greater accuracy has been obtained, much speedier examinations made and altogether the whole standard of the work carried out in this department has been improved. The results shown have been very satisfactory.

##### *Massage, Electro-Therapeutic and Light Treatment.*

The work in this department continues to increase. The treatments are carried out by a full-time, resident massage sister and a part-time non-resident masseur. The scope of treatment available is fully comprehensive and the department, although small, is adequate for the numbers at present passing through it.

##### *Maternity Department.*

The number of deliveries (232) shows an increase of 35. This number can be easily exceeded by accepting more cases at the Ante-natal Clinic, but a certain limit to the number of bookings must be imposed owing to the narrow margin of available accommodation. Two striking facts are noted in reviewing the figures in this section: one is the high percentage (25) of emergency cases admitted to the hospital and the other is the very high incidence of toxæmia of pregnancy. The number of women who had abnormal conditions of pregnancy and/or labour closely approximates 50 per cent. of the total number of admissions to the department.

The maternal morbidity and maternal mortality rates per 1,000 women delivered, which were 128.8 and 35.5 respectively for 1933, show a remarkable decrease to 47.4 and 8.6 respectively for 1934.

##### *Pathological Department.*

The standard and amount of work has been maintained, the figures differing little from those of last year.

Towards the latter part of the year arrangements were completed for the establishment of an excellently equipped central pathological laboratory at the West Middlesex County Hospital to serve the hospitals of the southern area. Most of the investigations previously made at North Middlesex County Hospital are now carried out for this hospital at the new laboratory. One of the aims of this new service is to promote a closer co-operation between the pathologist and clinician. Dr. W. Broughton-Alecock, pathologist, visits the hospital weekly, or oftener as circumstances demand.



Ear, Nose and Throat.

There is no special allocation of beds in this department owing to the difficulty in making separate accommodation. This is an ideal which may be made possible when the future hospital extensions are completed. The work continues to increase and the clinic for diseases of the ear, nose and throat accounts for a large proportion of the out-patient attendances.

CASUALTY AND OUT-PATIENT DEPARTMENT.

The building previously used as an out-patient department was found to be too small to deal with the increasing numbers of patients seeking treatment. Accordingly, the building which served as an isolation department has been converted for use as a temporary out-patient department and the work of the department has been reorganized. The old department is used now solely for the examination of cases for admission or discharge. The work is divided strictly into clinics, new out-patients being referred to the appropriate clinic at the time of their first examination. Numerous cases are referred to this department for consultation, special opinion or treatment, and in this way a close co-operation is maintained between the hospital and the medical practitioners. A list of the various clinics held in the department is given below.

Clinic.	Time.	Day.
Dental .. .. .	9 a.m.	Monday.
Medical .. .. .	2 p.m.	„
Surgical (i) .. .. .	2 p.m.	Tuesday.
Ear, Nose and Throat .. .. .	2 p.m.	Wednesday.
Orthopædic and Fracture .. .. .	2 p.m.	Thursday.
Ante-natal .. .. .	10 a.m.	Friday.
Surgical (ii).. .. .	2 p.m.	„

CO-OPERATION WITH GENERAL MEDICAL PRACTITIONERS.

The day a patient is discharged, the medical officer responsible for the care and treatment of the case while in hospital writes to the medical practitioner, giving any important details of examinations or treatments. This service is carried out in all cases where it is considered that such information would be helpful to the medical practitioner in the subsequent treatment of the patient. During the year 1,366 such letters have been sent. This number does not include the numerous replies written in the out-patient department relating to patients sent in by doctors for an opinion.

Statistical Tables and Analyses.

Remaining in Hospital, 1st January, 1934 .. .. .	88
Admitted .. .. .	2,498
Born in Hospital .. .. .	213
	2,799
Discharged .. .. .	2,494
Died .. .. .	193
Patients treated to a conclusion during the year .. .. .	2,687
Remaining in Hospital on 31st December, 1934 .. .. .	112

Classification of Patients Treated to a Conclusion.

Male infants under 3 .. .. .	203
Boys, 3-16 .. .. .	279
Men .. .. .	740
	1,222
Female infants under 3 .. .. .	183
Girls, 3-16 .. .. .	253
Women .. .. .	1,031
	1,465
Total .. .. .	2,687

Children under 16 constituted 34·1 per cent. of all patients treated.  
The number of patients treated to a conclusion is the subject of the tables which follow.



I.—TABLE SHOWING HOW THE 2,687 PATIENTS TREATED TO A CONCLUSION DURING THE YEAR WERE ORIGINALLY ADMITTED.

1. By Relieving Officer's Order	..	..	..	..	..	1,081
2.*By Medical Superintendent	..	..	..	..	..	1,393
Births	..	..	..	..	..	213
Total						2,687

Of the above patients, 59·7 per cent. were admitted by the Medical Superintendent.

II. TABLE SHOWING THE DISTRICTS TO WHICH THE 2,687 PATIENTS BELONGED.

Uxbridge	..	..	..	..	..	799
Yiewsley and West Drayton	..	..	..	..	..	302
Ruislip-Northwood	..	..	..	..	..	90
Southall-Norwood	..	..	..	..	..	752
Hayes and Harlington	..	..	..	..	..	521
Other districts..	..	..	..	..	..	223
Total						2,687

Note.—The allotment of an accident case to any one of the preceding districts is governed by the following rules :—

- (1) A person admitted, who is normally resident within the County, becomes a case for the district of residence, irrespective of the district in which the accident occurred.
- (2) A person admitted, not being normally resident within the County, becomes a case for the district in which the accident actually occurred.
- (3) A person admitted from and normally resident outside the County area becomes a case for the Urban District of Uxbridge, in which the Hillingdon County Hospital is situate.

III.—TABLE SHOWING THE RESULTS OF TREATMENT OR THE TERMINATION, TOGETHER WITH ANALYSES OF DEATHS IN AGE AND OTHER GROUPS.

Cured	..	..	..	..	..	2,157 = 80·3 per cent.
Relieved	..	..	..	..	..	231 = 8·6 „
Unrelieved	..	..	..	..	..	106 = 3·9 „
Died	..	..	..	..	..	193 = 7·2 „

Analysis of Deaths in Age Groups.

Ages.				Male.	Female.	Total.
Under 1..	..	..	..	24	18	42
1-2	..	..	..	2	2	4
2-5	..	..	..	2	3	5
5-15	..	..	..	3	2	5
15-25	..	..	..	8	11	19
25-35	..	..	..	16	11	27
35-45	..	..	..	13	8	21
45-55	..	..	..	13	6	19
55-65	..	..	..	17	9	26
65-75	..	..	..	9	6	15
Over 75..	..	..	..	2	8	10
Totals				109	84	193

	Treated.	Per-centage of Total.	Died.	Case Mortality per cent.
Medical cases	767	28·5	101	13·2
Surgical and obstetric cases	1,920	71·5	92	4·8

\* Not available in detail for 1934.

							Case Mortality per cent.
*Deaths within 24 hours of admission	..	..	..	..	..	45	23·4
Deaths 24 to 48 hours after admission	..	..	..	..	..	13	6·7
Deaths 48 to 72 hours after admission	..	..	..	..	..	11	5·7
All other deaths	..	..	..	..	..	124	64·2
Total deaths							100
*Injuries	...	...	...	...	...	...	8
Terminal stage—acute disease	...	...	...	...	...	...	23
Terminal stage—chronic disease	...	...	...	...	...	...	7
Neo-natal deaths	...	...	...	...	...	...	7
Total deaths within 24 hours							45

For the causes of death, *see* Table VII.

IV.—TABLE SHOWING THE BEHAVIOUR OF PATIENTS AND THEIR MANNER OF DISCHARGE.

Patients whose behaviour was normal							2,680
Patients whose behaviour was abnormal							7*
Total							2,687
*Troublesome	...	...	...	...	...	...	4
Mental	...	...	...	...	...	...	2
Suicidal	...	...	...	...	...	...	1
							7

Discharge.

In the normal manner or by death	..	..	..	..	..	..	2,619
At own request, with Medical Superintendent's approval	..	..	..	..	..	..	33
At own request, against Medical Superintendent's approval	..	..	..	..	..	..	35
Ejected for misconduct	..	..	..	..	..	..	—
Total							2,687

V.—TABLE SHOWING WHITHER THE 2,687 PATIENTS WERE DISCHARGED.

1. To own, relative's or friend's home	..	..	..	..	..	..	1,912
2. To institution or children's home—M.C.C.	..	..	..	..	..	..	60
3. To out-patient department	..	..	..	..	..	..	437
4. To hospital or institution—other authority	..	..	..	..	..	..	12
5. To convalescent home	..	..	..	..	..	..	22
6. To acute infectious disease hospital	..	..	..	..	..	..	5
7. To mental hospital	..	..	..	..	..	..	—
8. To sanatorium	..	..	..	..	..	..	32
9. To another M.C.C. General Hospital	..	..	..	..	..	..	14
Deaths	..	..	..	..	..	..	193
Total							2,687

VI.—AVERAGES FOR THE YEAR.

Beds—average daily complement	..	..	..	..	..	..	141
Beds—average daily number available	..	..	..	..	..	..	133·1
Beds—average daily number occupied	..	..	..	..	..	..	130·9
Average daily percentage of available beds occupied	..	..	..	..	..	..	92·1
Patients per occupied bed—average number per annum	..	..	..	..	..	..	20·5
Nursing staff—average daily number	..	..	..	..	..	..	70
Occupied beds per nurse—average number	..	..	..	..	..	..	1·9
Admissions—average daily number	..	..	..	..	..	..	7·4
Dangerously ill—average daily percentage	..	..	..	..	..	..	6·5
Stay—average length in days per patient	..	..	..	..	..	..	17·8
Maximum number of beds occupied—159 on 17th April, 1934.							
Minimum number of beds occupied—92 on 1st January, 1934.							

VII.—CLASSIFICATION OF THE DISEASES AND CONDITIONS FOR WHICH THE 2,687 PATIENTS DISCHARGED DURING 1934 WERE PRIMARILY TREATED.

Disease or Condition.	Medical.			Surgical and Obstetric.			Totals.
	Re-lieved.	Unre-lieved.	Died.	Re-lieved.	Unre-lieved.	Died.	
Healthy—							
No abnormality detected .. ..	13	—	—	—	—	—	13
Breast-fed infants with mother ..	5	—	—	—	—	—	5
Births .. .. .	—	—	—	203	—	10	213
Diseases due to infection—							
Erysipelas .. .. .	3	—	1	—	—	—	4
Gonorrhœa .. .. .	1	2	—	—	—	—	3
Influenza .. .. .	8	—	—	—	—	—	8
Measles—morbilli and rubella .. ..	18	1	2	—	—	—	21
Mumps, pertussis and varicella ..	9	1	—	—	—	—	10
Rheumatism, acute and sub-acute ..	26	—	—	—	—	—	26
Rheumatic chorea .. .. .	7	—	—	—	—	—	7
Syphilis, primary and secondary ..	1	—	—	—	—	—	1
Tuberculosis, pulmonary .. .. .	24	40	11	—	—	—	75
Tuberculosis, non-pulmonary .. ..	5	2	10	7	3	1	28
Miscellaneous notifiable .. .. .	4	3	2	—	—	—	9
Miscellaneous non-notifiable .. ..	—	—	3	1	—	—	4
Infestations by metazoan parasites ..	2	—	—	—	—	—	2
Diseases of the nervous system—							
Of vascular origin .. .. .	3	—	5	—	—	—	8
Mental diseases .. .. .	—	3	—	—	—	—	3
Miscellaneous .. .. .	22	—	5	—	—	1	28
Diseases of the eye .. .. .	—	—	—	4	—	—	4
Diseases of the ear .. .. .	—	—	—	66	—	2	68
Diseases of the nose and sinuses ..	—	—	—	7	—	—	7
Diseases of the circulatory system—							
Rheumatic carditis chronic .. ..	13	5	4	—	—	—	22
Myocardial degeneration, &c. .. ..	2	1	2	—	—	—	5
Arteriosclerosis .. .. .	2	3	2	—	—	—	7
Of the veins .. .. .	2	—	—	14	1	—	17
Miscellaneous .. .. .	6	—	8	—	—	—	14
Diseases of the blood and spleen ..	4	—	5	—	—	—	9
Diseases of the lymphatic system ..	12	1	—	38	—	—	51
Diseases of the endocrine glands ..	—	—	—	—	—	—	—
Diseases of the breast .. .. .	—	—	—	3	—	—	3
Diseases of the respiratory system—							
Laryngitis .. .. .	2	—	1	—	—	—	3
Bronchitis, acute .. .. .	27	—	—	—	—	—	27
Bronchitis, chronic .. .. .	11	—	1	—	—	—	12
Pneumonia, primary .. .. .	36	—	11	—	—	—	47
Bronchopneumonia .. .. .	19	—	10	—	—	—	29
Pleurisy .. .. .	10	—	—	—	—	—	10
Miscellaneous .. .. .	11	—	1	9	—	—	21
Diseases of the teeth and gums .. ..	—	—	—	16	—	2	18
Diseases of the digestive system—							
Tonsillitis .. .. .	39	—	—	32	—	—	71
Enlarged tonsils and/or adenoids ..	—	—	—	212	—	—	212
Peptic ulcers .. .. .	28	1	1	13	—	6	49
Dyspepsia of infants .. .. .	16	—	5	—	—	—	21
Of stomach and duodenum—other ..	—	—	—	1	—	—	1
Appendicitis .. .. .	—	—	—	142	—	10	152
Visceroptosis, constipation and stasis ..	46	—	—	—	—	—	46



Disease or Condition.	Medical.			Surgical and Obstetric.			Totals.
	Re- lieved.	Unre- lieved.	Died.	Re- lieved.	Unre- lieved	Died	
Diseases of the digestive system— <i>contd.</i>							
Herniæ .. .. .	—	—	—	66	1	4	71
Of intestine, rectum, anus—other ..	2	—	—	27	1	3	33
Of liver and gall bladder .. ..	13	1	—	15	1	—	30
Of peritoneum .. .. .	—	—	—	6	—	4	10
Miscellaneous .. .. .	24	—	—	6	—	3	33
Diseases due to disorders of nutrition or of metabolism .. .. .	22	2	5	—	—	—	29
Diseases of the generative system—							
Of the male organs .. .. .	—	—	—	20	4	4	28
Of the female organs .. .. .	—	—	—	65	—	—	65
Pregnancy, parturition and puerperium— normal and abnormal conditions ..	—	—	—	421	—	5	426
Diseases of the organs of locomotion—							
Fibrositis group .. .. .	6	—	—	—	—	—	6
Arthritis deformans .. .. .	10	—	—	—	—	—	10
Osteomyelitis, acute and chronic ..	—	—	—	17	1	1	19
Miscellaneous .. .. .	4	1	—	15	—	—	20
Diseases of the areolar tissue .. ..	—	—	—	36	—	2	38
Diseases of the skin .. .. .	25	—	—	10	—	—	35
Diseases of the urinary organs—							
Nephritis .. .. .	10	—	5	—	—	—	15
Pyelitis .. .. .	35	1	—	—	—	—	36
Miscellaneous .. .. .	3	—	1	35	1	1	41
Injuries—							
Superficial .. .. .	—	—	—	44	—	—	44
Deep and foreign bodies .. .. .	—	—	—	21	—	—	21
Shock or other injury .. .. .	—	—	—	2	—	—	2
Cerebral concussion .. .. .	—	—	—	34	—	—	34
Cerebral contusion .. .. .	—	—	—	1	—	2	3
Burns and scalds .. .. .	—	—	—	11	—	2	13
Wounds, clean and septic .. .. .	—	—	—	18	1	—	19
Septic conditions of the hand .. ..	—	—	—	21	—	—	21
Fractures and dislocations .. .. .	—	—	—	105	2	11	118
Miscellaneous .. .. .	—	—	—	4	—	—	4
Tumours, benign—							
Of generative system .. .. .	—	—	—	8	3	—	11
Of other organs and structures ..	—	—	—	4	—	—	4
Tumours, malignant— ..							
Of the digestive system .. .. .	—	—	—	2	12	8	22
Of the generative system .. .. .	—	—	—	3	2	1	6
Of the urinary organs .. .. .	—	—	—	—	3	—	3
Of other organs and structures ..	—	—	—	2	1	4	7
Tumours, intra-cranial .. .. .	—	—	—	—	—	—	—
Cysts .. .. .	—	—	—	2	—	—	2
Malformations, congenital .. .. .	—	—	—	1	1	5	7
Poisonings .. .. .	7	—	—	—	—	—	7
For special investigation/treatment ..	—	—	—	—	—	—	—
Totals .. .. .	598	68	101	1,790	38	92	2,687

Diseases and Conditions Treated to a Conclusion.

(Grouped in order of frequency.)

	Treated.	Died.
Diseases of digestive system .. .. .	446	36
Pregnancy, parturition and puerperium ..	426	5
Diseases of the ear, nose and throat .. ..	358	2
Injuries—general and local .. .. .	279	15
Births .. .. .	213	10
Diseases due to infection .. .. .	198	30
Diseases of the respiratory system .. ..	149	24
Diseases of the generative organs .. ..	93	4
Diseases of the urinary organs .. .. .	92	7
Diseases of areolar tissue and skin .. ..	73	2
Diseases of the circulatory system .. ..	65	16
Diseases of the organs of locomotion .. ..	55	1
Tumours .. .. .	55	13
Diseases of the lymphatic system .. ..	51	—
Diseases of remaining groups .. .. .	134	28
Total treated .. .. .	2,687 of whom	193 died.

Analysis of Fractures and Dislocations Treated to a Conclusion during the Year, together with the Results of their In-patient and Out-patient Treatment secured before or at 31st December.

	Nature.		Result.					Total.
	Simple.	Compound.	Very Good.	Good.	Medium.	Poor.	Died.	
Skull .. .. .	1	3	3	1	—	—	—	4
Skull with concussion .. .. .	8	4	9	1	—	—	2	12
Skull with cerebral contusion .. .. .	2	4	3	—	—	—	3	6
Vertebræ .. .. .	3	—	3	—	—	—	—	3
Ribs .. .. .	2	—	2	—	—	—	—	2
Clavicle .. .. .	3	—	3	—	—	—	—	3
Scapula .. .. .	—	—	—	—	—	—	—	—
Humerus .. .. .	6	—	4	1	1	—	—	6
Radius or ulna or both .. .. .	4	1	3	—	1	1	—	5
Carpus, metacarpus or phalanges .. ..	—	3	—	—	3	—	—	3
Pelvis .. .. .	1	—	1	—	—	—	—	1
Femur, neck or great trochanter .. ..	4	—	1	1	—	2	—	4
Femur, shaft or lower end .. .. .	11	—	9	2	—	—	—	11
Patella .. .. .	3	1	3	—	1	—	—	4
Tibia .. .. .	3	—	3	—	—	—	—	3
Fibula .. .. .	4	1	5	—	—	—	—	5
Tibia and fibula, simple .. .. .	12	—	10	2	—	—	—	12
Tibia and fibula, compound .. .. .	—	1	—	1	—	—	—	1
Tarsus, metatarsus or phalanges .. ..	4	1	3	—	1	—	1	5
† Multiple bony injuries, simple .. ..	7	—	2	3	1	—	1	7
†* Multiple bony injuries, compound ..	4	—	—	1	2	—	1	4
Fracture-dislocations, various .. ..	7	—	3	3	—	—	1	7
Separated epiphyses .. .. .	1	—	1	—	—	—	—	1
Dislocations, various .. .. .	2	—	—	1	1	—	—	2
Pathological, malunited, &c. .. ..	7	—	—	3	2	—	2	7
Totals .. .. .	99	19	71	20	13	3	11	118

† Multiple fractures of the vertebral column, hand and foot and cases of fractured ribs, tibia with fibula and radius with ulna are not included in the group unless associated with one or more fractures or dislocations elsewhere. Multiple fractures of the bones of the skull, face and nose are not classified as multiple.

\* One or more injuries being compound, not necessarily all.

16.1 per cent. of the fractures and fracture dislocation cases were of the compound variety.

Men	...	...	...	...	...	...	...	58, of whom 6 died.
Women	...	...	...	...	...	...	...	25, of whom 4 died.
Children under 16—male	...	...	...	...	...	...	...	19, of whom 1 died.
Children under 16—female	...	...	...	...	...	...	...	16, of whom none died.
Total	...	...	...	...	...	...	...	118, of whom 11 died.

Special Methods of Treatment applied to the above Cases.

Manipulation under general anæsthesia	..	..	..	..	9
Application of plaster of Paris	..	..	..	..	79
Application of plaster of Paris under general anæsthesia	..	..	..	..	11
Transfixion pin or wire	..	..	..	..	9
Open operation	..	..	..	..	5
Amputation for compound fracture	..	..	..	..	7

The following compound fracture cases had amputation—radius and ulna (above wrist) ; 2 cases of phalanx of hand ; 2 cases of finger ; tibia and fibula, comminuted and compound (through femur) ; and phalanx of foot. There was not a death after amputation.

Results of Treatment.

							1934.
Very good	..	..	..	..	..	71	60.2 per cent.
Good	..	..	..	..	..	20	17.0 „
Medium or poor	..	..	..	..	..	16	13.5 „
Died	..	..	..	..	..	11	9.3 „
Totals	..	..	..	..	..	118	100.0 „

N.B.—The result of treatment is classified as “very good” only when the three following conditions are fulfilled :—

1. Little or no depreciation of function.
2. Anatomical alignment of fragments.
3. Shortening, if present, not exceeding half-an-inch.

The result of a fracture successfully treated by amputation is classified as medium.

Cause of death :—

Cerebral contusion or laceration	..	..	..	..	..	5
Septic meningitis	..	..	..	..	..	1
Shock and internal hæmorrhage	..	..	..	..	..	1
General peritonitis (ruptured bowel)	..	..	..	..	..	1
Hypostatic pneumonia	..	..	..	..	..	3
Total fracture deaths	..	..	..	..	..	11

The above figures relate to the fracture cases treated in hospital. The number is small considering the size of the hospital and the extent of the district.

At this hospital very adequate facilities and equipment exist for the treatment of fractures. The essential conditions of an organized fracture service as enumerated by the Committee on Fractures,\* viz., segregation of cases, continuity of treatment, after-care and unity of control, are carried out in the practice of this hospital. All fracture cases are followed up at the Fracture Clinic until a satisfactory result is obtained.

VIII.—THE WORK OF THE SPECIAL DEPARTMENTS.

1. Surgical	..	..	..	Major operations	..	..	652
				Minor operations	..	..	1,260
							1,912
2. Anæsthetics	..	..	..	General	..	..	1,205
				Local	..	..	366
				Spinal	..	..	140
3. Radiological	..	..	..	Patients investigated	..	..	1,202
				Investigations	..	..	1,774

\* Vide Report of Committee on Fractures—Supplement to the *British Medical Journal*, 16th February, 1935.

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4. Massage .. .. .	Patients .. .. .	430
	Treatment .. .. .	5,266
5. Electro - Therapeutic and Light	Patients .. .. .	119
	Treatments .. .. .	2,662
6. Maternity .. .. .	Women examined at Ante-natal Clinic .. .. .	275
	Attendances at Ante-natal Clinic	1,397
	Births .. .. .	234
	*Obstetric operations .. .. .	135
7. Pathological .. .. .	Investigations .. .. .	2,153
8. Ear, Nose and Throat ..	*Operations .. .. .	329
9. Therapeutic, Diagnostic, Prophylactic.	Special procedures .. .. .	260
10. Casualty and Out-Patients	†Patients .. .. .	2,431
	Attendances .. .. .	12,753
	Operations .. .. .	496
11. Nurses' Sick Room ..	Admissions .. .. .	20

*Note.*—Included in the above figures are those of the minor operations, anæsthetics, special treatments and investigations performed on, given to or made on, patients in the Casualty, various out-patient departments and Nurses' sick room.

1. Department of Surgery.  
*Analysis of Operations performed during the Year.*

	In-Patients.		Casualty and Out-Patients.		Nurses.		Totals.
	Major.	Minor.	Major.	Minor.	Major.	Minor.	
<i>General—</i>							
On skin and superficial structures ..	12	101	—	223	—	4	340
On arteries, veins and lymphatics ..	1	32	—	87	—	1	121
On nerves .. .. .	2	2	—	1	—	—	5
On bones and joints .. .. .	36	116	—	53	—	—	205
On muscles, tendons, bursæ and fasciæ .. .. .	3	6	—	9	—	—	18
Amputations .. .. .	5	4	—	6	—	—	15
On skull, brain and spine .. .. .	4	—	—	—	—	—	4
On face .. .. .	—	3	1	26	—	—	30
On eye .. .. .	—	—	—	6	—	—	6
On mouth, pharynx and œsophagus	3	4	—	7	—	—	14
On thyroid, accessory glands and neck .. .. .	2	—	—	—	—	—	2
On breast .. .. .	—	5	—	5	—	—	10
On thorax and contents .. .. .	14	6	—	—	—	—	20
On abdominal wall and cavity ..	97	2	—	—	—	—	99
On stomach and duodenum .. .. .	22	—	—	—	—	—	22
On intestine, rectum and anus ..	143	34	—	—	1	—	178
On liver, gall bladder, pancreas and spleen .. .. .	17	—	—	—	—	—	17
On kidney and urinary tract ..	20	99	—	3	—	—	122
On male generative organs .. .. .	13	8	—	31	—	—	52
On female generative organs ..	137	19	—	1	—	—	157
Unclassified .. .. .	2	8	—	1	—	—	11
	533	449	1	459	1	5	1,448
<i>Special—</i>							
Obstetric .. .. .	41	88	—	6	—	—	135
On ear, nose and throat .. .. .	74	223	—	30	2	—	329
	648	760	1	495	3	5	1,912
Grand totals .. .. .	1,408		496		8		

\* These operations are included in the numbers of major and minor operations and are not additional.  
† Ante-natal patients, attendances and operations included.

Operations—

Major	..	..	..	..	..	..	..	..	652
Minor	..	..	..	..	..	..	..	..	1,260

Operative mortality rates—

Per 100 major operations	..	..	..	..	..	6·00
Per 100 minor operations	..	..	..	..	..	0·55
Per 100 major and minor operations	..	..	..	..	..	2·40

When the period of anæsthesia for an operation classified as minor exceeds half-an-hour, that operation is deemed a major one.

Operations performed in theatres—

	General.	Ear, Nose and Throat.	Total.
By Medical Superintendent .. .. .	181	27	208
By Deputy Medical Superintendent .. .. .	282	241	523
By Resident Assistant Medical Officers .. .. .	53	28	81
Totals.. .. .	516	296	812

Below are given, under anatomical headings, the names and numbers of the operations most frequently performed.

On Skin and Superficial Structures (340)—

Toilet and suturing of wound	..	..	..	..	..	94
Incision of abscess, cellulitis, boil or carbuncle	..	..	..	..	..	94
For sinus, ulcer, scar, cyst, tumour	..	..	..	..	..	49
For septic infection of hand	..	..	..	..	..	65

On Arteries, Veins and Lymphatics (121)—

Injection of varicose veins	..	..	..	..	..	52
For suppurative lymphadenitis	..	..	..	..	..	64

On Bones and Joints (205)—

The majority of operations in this section were carried out for the treatment of fractures and dislocations, manipulation of fragments (60) and the application of plaster of Paris (90) represent the most common operations performed.

Amputations (15)—

This total comprises operations on the arm (2), the femur (1), tibia and fibula (1) and fingers and toes (11).

On Mouth, Pharynx and Oesophagus (14)—

In this section is included a case of œsophagectomy by R. Rutherford, F.R.C.S., who published its description in the *British Journal of Surgery*, October, 1934, page 340 (Vol. XXII).

On Abdominal Wall and Cavity (99)—

Herniotomy for inguinal herniæ (6 strangulated)	..	..	..	..	49
Herniotomy for femoral herniæ (2 strangulated)	..	..	..	..	9
Herniotomy for ventral and umbilical herniæ (1 strangulated)	..	..	..	..	5
Laparotomy—exploratory for adhesiolysis, peritonitis, abscess, &c.	..	..	..	..	35

On Stomach, Duodenum, Intestine Rectum, Anus, Gall bladder (217)—

For peptic ulcer (12 perforated) .. .. .	19
Enterostomy/colostomy, with/without resection .. .. .	12
Enterectomy/Colectomy .. .. .	5
Anastomoses—various .. .. .	4
Appendicectomy .. .. .	69
Appendicectomy (Interval—previous Oschner-Sherren treatment) .. .. .	8
Appendicectomy with drainage .. .. .	35
Drainage of appendix abscess without appendicectomy .. .. .	3
Proctoscopy/sigmoidoscopy (minor operation) .. .. .	11
For ischio-rectal and anal abscess .. .. .	11
For pancreatic cyst .. .. .	1
Cholecysto-gastrostomy .. .. .	1
Cholecystectomy (10 with *appendicectomy) .. .. .	15

On Kidney, Ureter, Bladder and Urethra (122)—

Nephrectomy, nephrotomy .. .. .	3
Cystoscopy and ureteric catheterisation .. .. .	11
Ureterolithotomy .. .. .	2
Cystoscopy (minor operation) .. .. .	52
Suprapubic cystostomy .. .. .	9

On Male Generative Organs (52)—

Suprapubic prostatectomy .. .. .	8
Circumcision (minor operation) .. .. .	22

On Female Generative Organs (157)—

On ovary and/or tube .. .. .	11
Ectopic gestation .. .. .	2
Hysteropexy .. .. .	3
Uterine curettage .. .. .	13
Curettage for abortion .. .. .	83
Sub-total hysterectomy .. .. .	5
Pan-hysterectomy .. .. .	4
Vaginal hysterectomy .. .. .	3
Vaginal plastic operation .. .. .	5

Laparotomy was performed 250 times. This number does not include herniotomies for inguinal and femoral herniæ and open operations on the kidney and bladder. 115 laparotomies were for appendicitis. During the year 116 persons were discharged or died after operations for appendicitis.

Analysis of Operations for Appendicitis performed on Patients treated to a Conclusion.

	Males.			Females.			Totals.		
	Relieved.	Died.	Total.	Relieved.	Died.	Total.	Relieved.	Died.	Total.
Acute† .. .. .	26	—	26	17	2	19	43	2	45
Acute with local peritonitis .. .. .	20	2	22	9	1	10	29	3	32
Acute with local abscess .. .. .	1	2	3	2	1	3	3	3	6
Acute with general peritonitis .. .. .	6	2	8	9	—	9	15	2	17
Chronic .. .. .	4	—	4	6	—	6	10	—	10
Interval‡ .. .. .	2	—	2	4	—	4	6	—	6
Totals .. .. .	59	6	65	47	4	51	106	10	116

Operative mortality rate of 100 acute cases = 10 per cent.

There were 10 deaths in this section. The duration of illness prior to admission was two days or under in only four cases. The other cases were respectively of 3, 3, 3, 4, 7 and 8 days' duration prior to admission. In one of the three cases where a local abscess was found, general peritonitis was also present. The age in four patients varied from fifty to seventy-five years.

\* Not included in appendicectomy figures.  
† Appendices proved by section to be acutely inflamed.  
‡ Cases previously admitted for appendix abscess and which received Oschner-Sherren treatment.



## 2. Anæsthetics.

*Analysis of Anæsthetics administered during the Year.*

	In-Patients.	Casualty and Out- Patients.	Dental.	Totals.
<i>General Anæsthesia—</i>				
By chloroform, ether or mixture ..	34	3	5	42
By ethyl chloride with/without ether ..	92	63	2	157
By nitrous oxide and oxygen .. ..	82	168	54	304
By nitrous oxide, oxygen and ether ..	500	—	—	500
*By Evipan .. .. .	136	18	48	202
<i>Local Anæsthesia—</i>				
By application to mucous membrane ..	26	19	—	45
By freezing with ethyl chloride ..	3	6	—	9
†By infiltration .. .. .	201	95	14	310
Regional by infiltration and nerve block	2	—	—	2
<i>†Spinal Anæsthesia—</i>				
By intrathecal injection .. ..	140	—	—	140
Totals .. .. .	1,126	372	123	1,711

\* Supplemented by N<sub>2</sub>O & E. (2) N<sub>2</sub>O & O<sub>2</sub> (7). Local (3).

† Supplemented by N<sub>2</sub>O & O<sub>2</sub> (5).

† Supplemented by N<sub>2</sub>O, O<sub>2</sub> & E. (2) N<sub>2</sub>O & O<sub>2</sub> (3).

*Summary.*

General anæsthetics .. .. .	1,205
Local anæsthetics .. .. .	366
Spinal anæsthetics .. .. .	140
Total .. .. .	1,711

Of the general anæsthetics given to in-patients, 84 were administered in the wards.

Evipan has been used as a general anæsthetic in 202 cases during the last year. It is an efficient and extremely pleasant anæsthetic, with a minimum of after-effects. It has been employed mainly for cases requiring short but deep anæsthesia, such as complete dental clearance, reduction of fractures under the fluorescent screen, and in naso-pharyngeal cases with obstruction of the airway, *e.g.*, quinsy in a fat patient. Combined with nembutal as a basal narcotic, it would seem to be an ideal anæsthesia in the operation of sub-mucous resection of the nasal septum. No fatalities have occurred with its use.

There were five deaths under anæsthesia. Two occurred under spinal anæsthesia. In one of these the patient collapsed while the peritoneum was being opened, and died immediately from hæmorrhage, due to erosion of an artery in the bed of a duodenal ulcer. The other was a case of gastric ulcer which had been perforated for fifteen hours, giving rise to purulent peritonitis. The patient died as the operation was terminating. One other case is mentioned under the Ear, Nose and Throat Section of a child aged 8 months, who died half-an-hour after an operation for acute mastoiditis. Another was a patient aged 71, who died suddenly after the termination of an operation for perineal excision of the rectum. The fifth case was a child of one year who died during induction—ethyl chloride and ether sequence—prior to an operation for inguinal hernia. At autopsy an enlarged thymus was found.

## 3. Radiological Department.

In-patients investigated .. .. .	637
Out-patients investigated .. .. .	565
Total patients investigated .. .. .	1,202

Analysis of Investigations made during the Year.

	Appearances.		Totals.
	Normal.	Abnormal.	
Skull for injury, disease or deformity .. ..	55	34	89
Chest and contents for disease .. .. .	79	228	307
Alimentary tract .. .. .	96	83	179
Biliary passages .. .. .	15	7	22
Urinary system .. .. .	72	45	117
Generative system .. .. .	30	13	43
Bones and joints for injury .. .. .	256	457	713
Bones and joints for disease or deformity .. ..	97	125	222
Miscellaneous .. .. .	35	26	61
Dental .. .. .	12	9	21
Totals .. .. .	747	1,027	1,774

Special Methods of Investigation.\*

Barium meals .. .. .	138
Barium enemata .. .. .	41
Cholecystograms .. .. .	9
Injections—Lipiodol/sodium bromide .. .. .	11
Pyelograms—retrograde .. .. .	7
Urograms—intravenous .. .. .	47
Screening the removal of a foreign body .. ..	7
Manipulation and fixation of fracture under fluorescent screen ..	17
	277
Average number of investigations per patient .. ..	1.47
†Number of radiograms taken (29 being on X-ray paper) ..	3,310
†Average number of radiograms per investigation .. ..	1.86
†Average number of radiograms per patient .. .. .	2.75
Number of dental radiograms taken .. .. .	61
Number of dental patients .. .. .	21

4. Massage and 5. Electro-Therapeutic and Light Departments.

Patients.	Massage.			Electro-Therapeutic.			Ultra-Violet Light.		
	In-patients.	Out-patients.	Total.	In-patients.	Out-patients.	Total.	In-patients.	Out-patients.	Total.
Remaining from 1933 .. ..	14	17	31	4	14	18	1	3	4
Admitted to department .. ..	254	145	399	19	55	74	13	10	23
Remaining under treatment .. ..	12	23	35	4	20	24	3	1	4
Treated to a conclusion .. ..	256	139	395	19	49	68	11	12	23
Treatments .. .. .	2,401	2,865	5,266	397	1,833	2,230	165	267	432

Applications of radiant heat, made in conjunction with tannic acid in the treatment of burns and scalds, or for treatment of shock, &c., are not included.

\* Included in the above analysis of investigations and therefore not additional.  
† Dental radiograms and dental patients included.

Medical cases admitted	..	..	..	..	334	64·5 per cent.
Surgical cases admitted	..	..	..	..	184	35·5 „
Total cases admitted					518	100·0

The treatments given in the above-named departments comprise—massage and remedial exercises, galvanism, faradism, sinusoidal current, radiant heat and ultra-violet light by mercury vapour lamps.

6. Maternity Department.

I. ANTE-NATAL CLINIC.

Ante-natal sessions held	..	..	..	..	..	52
Expectant mothers examined	..	..	..	..	..	275
Total attendances	..	..	..	..	..	1,397
Average number seen per session	..	..	..	..	..	24·9
Average number of attendances per expectant mother	..	..	..	..	..	5·08
Women referred for dental treatment	..	..	..	..	..	14
Women referred for pathological investigation	..	..	..	..	..	Not recorded.
Women referred for radiological investigation	..	..	..	..	..	24

II. STATISTICAL TABLES AND ANALYSES OF CONFINEMENTS. ANALYSIS OF 232 DELIVERIES WHICH TOOK PLACE DURING THE YEAR.

							Per cent.
Mother admitted	..		Via ante-natal clinic	..	..	174	75·0
			As an emergency case	..	..	58	25·0
			Total	..	..	232	100·0
Civil State	..	..	Married	..	..	215	92·7
			Unmarried	..	..	17	7·3
			Total	..	..	232	100·0
Parous State	..	..	Primipara	..	..	132	56·9
			Multipara	..	..	100	43·1
			Total	..	..	232	100·0
Presentation	..	..	Vertex—occipito anterior		..	190	
			Vertex—occipito posterior		..	23	
			Breech—uncomplicated		..	11	
			Breech—complicated	..	..	8	
			Transverse	..	..	2	
			Brow or face	..	..	—	
			Born before admission		..	8	
		Total	..	..	242		

There were two sets of twins—

Transverse and vertex occipito anterior	..	..	..	..	1 set.
Both breech	..	..	..	..	1 set.



INDUCTION OF LABOUR.

Indication.	Number of Cases that had Induction.		
	Of Premature Labour.	At or After Term.	Totals.
Disproportion .. .. .	4	6	10
Maternal toxæmia .. .. .	14	4	18
Post maturity .. .. .	—	2	2
Ante-partum hæmorrhage .. .. .	—	2	2
Bad obstetric history .. .. .	1	2	3
Totals .. .. .	19	16	35

Medical induction of labour was undertaken in 35 cases (15·15 per cent. of labours).  
In 14 cases it was successful and delivery was by natural forces.  
In 21 cases, when medical induction had failed twice, surgical induction was successful in 19.  
In the two remaining cases delivery was by forceps.  
In no case was the puerperium morbid.  
There were 33 live birth and 2 stillbirths (each due to maternal toxæmia).  
There were 2 neo-natal deaths (maternal toxæmia and prematurity).

Method of Delivery of the 234 Infants Born.

Method of Delivery.	No. of Births.	Deaths.		
		Maternal.	Foetal.	Neo-natal.
Natural forces .. .. .	161	—	11	6
Natural forces after induction .. .. .	33	—	2	2
Manual of extended breech .. .. .	8	—	—	—
Manual of transverse .. .. .	2	—	—	—
Embryotomy .. .. .	1	—	1	—
Forceps .. .. .	19	2	4	1
Cæsarean section .. .. .	9	—	2	1
*Cæsarean hysterectomy .. .. .	1	—	1	—
Totals .. .. .	234	2	21	10

Midwives delivered .. .. . 195 women.  
Doctors delivered .. .. . 37 women.  
Midwives sought medical assistance for .. .. . 117 women.  
Forceps rate .. .. . 8·15 per 100 births.  
Maternal morbidity rate after forceps .. .. . 15·78 per cent.  
Anæsthetics given for obstetric purposes .. .. . 89 „  
Average length of lying-in period in days .. .. . 13·8 „

Pregnancy and Labour.

Conditions of both pregnancy and labour normal.. 116 .. 50·00 per cent.  
Conditions of either or both abnormal .. .. 114 .. 49·14 „  
Multiple cyesis and labour, normal and abnormal.. 2 .. 0·86 „

\* “ Full-time Pregnancy in a Rudimentary Horn of the Uterus.” R. Rutherford, F.R.C.S., and J. Morgan, M.D., *Lancet*, 15th December 1934, p. 1337.

Obstetric Operations.

Application of forceps .. .. .	19
Cæsarean section .. .. .	6
Cæsarean section and sterilisation .. .. .	3
Cæsarean hysterectomy .. .. .	1
For adherent placenta .. .. .	1
Episiotomy and repair .. .. .	1
Manual delivery of complicated breech .. .. .	8
Manual delivery of transverse .. .. .	2
Surgical inductions .. .. .	21
Embryotomy .. .. .	1
Repair of perineum—tear grade 1 .. .. .	41
tear grade 2 .. .. .	26
tear grade 3 .. .. .	—
Ante-natal clinic versions .. .. .	5
Total .. .. .	135

Indications for which Cæsarean sections were done :—

Indication.	Booked.	Emergency.	Totals.
Contracted pelvis and disproportion.. .. .	1	1	2
Disproportion and for sterilisation .. .. .	1	—	1
Chronic rheumatic carditis and for sterilisation .. .. .	1	—	1
Cardiac aneurysm and for sterilisation .. .. .	1	—	1
Placenta prævia .. .. .	2	—	2
Rigid cervix .. .. .	1	1	2
Totals.. .. .	7	2	9

There were 5 classical and 4 lower segment operations.  
There was not a maternal or neo-natal death.  
There were 2 foetal deaths.

Maternal Morbidity.

The figures given under this head relate to women admitted to the maternity department and to booked cases delivered before admission. Of this group all who had pyrexia in the puerperium (Ministry of Health standard) and all who died after delivery or undelivered are included as morbid. Cases of abortion and ectopic gestation are not admitted to the department. The maternal morbidity of cases of abortion is given under the head of abortion. No case of ectopic gestation was morbid.

—	Booked.	Emergency.	Totals.
Pyrexial cases .. .. .	1	8	9
Maternal deaths (both pyrexial) .. .. .	—	2	2
Pyrexial cases and maternal deaths .. .. .	1	10	11
Number of women delivered .. .. .	174	58	232
Maternal morbidity-rate per 1,000 delivered ..	5·7	172·4	47·4

Pyrexia in the Puerperium.

The Ministry of Health standard of puerperal pyrexia is adopted.  
Unless there is definite evidence to the contrary, every case of pyrexia occurring in the puerperium is assumed to be due to uterine infection.  
In addition to the conditions generally accepted as sequelæ of uterine infection, the following, when they occur in the puerperium, are returned also under that head: thrombosis, thrombophlebitis, phlegmasia alba dolens, pulmonary embolus, pneumonia and broncho-pneumonia.  
During the year 11 cases of pyrexia in the puerperium occurred ; 9 recovered and were discharged and 2 died.

Analysis of the 11 Puerperal Pyrexia Cases.

Register No.	Age.	Gravida.	Maturity (weeks.)	Complication of Labour and/or Maternal Complication.	Method of Delivery.	*Pyrexia.		Cause of Pyrexia.	Cervical Swabbing.	†Duration of Pyrexia in days.	Births.
						Date of Onset.	Day of Puer- perium.				
246E	44	3	40	Eclampsia .. ..	Forceps .. ..	3 Feb.	7	Uterine infection ..	—	7	Live.
586E	35	1	40	Rudimentary horn of uterus	Cæsarean hyster- ectomy	‡15 Feb.	—	Uterine infection ..	—	17	S.B.M.
626	26	1	40	None .. ..	Natural forces ..	8 Apr.	3	Uterine infection ..	—	9	Live.
634E	27	1	40	Failed forceps—toxæmia ..	Forceps .. ..	3 May	3	Uterine infection ..	—	3	S.B.M.
686E	42	1	40	Ante partum hæmorrhage	Cæsarean .. ..	28 Apr.	4	Uterine infection ..	—	6	S.B.
781E	28	1	40	**Rigid cervix .. ..	Cæsarean .. ..	19 May	2	Uterine infection ..	—	4	S.B.
1029E	28	1	40	Impacted breech .. ..	Manual .. ..	15 July	5	Uterine infection ..	—	3	S.B.
1264E	34	1	40	Persistent occipito posterior	Forceps .. ..	‡30 Sept.	—	Uterine infection ..	—	3	S.B.
1404E	34	1	40	**Rigid cervix .. ..	Cæsarean .. ..	9 Oct.	4	Septic abdominal wound	—	17	S.B.
1590E	30	2	32	Placenta prævia .. ..	Natural forces after surgical induction	‡29 Nov.	—	Pyelitis .. ..	—	17	Live.
1591E	23	2	40	Failed forceps—contraction ring	Embryotomy ..	‡26 Nov.	—	Vaginal lacerations and sepsis	—	12	S.B.

Summary of the 11 Pyrexial Cases.

Uterine infection (Puerperal fever)	..	..	..	..	8
Septic abdominal wound ..	..	..	..	..	1
Vaginal laceration and sepsis	..	..	..	..	1
Urinary infection .. ..	..	..	..	..	1
Total .. ..	..	..	..	..	—
					11
					—

Of the 11 women who had pyrexia in the puerperium, 8 were primiparæ.

\* Date and day of the second recording of a temperature of 99° F. or over. In every case the date given here is earlier than that on which the pyrexia became notifiable.  
† From date of onset to date of settlement at normal. E. after a register number indicates an emergency case. S.B.M.—Still birth, macerated.  
‡ Date of delivery, pyrexia pre-existed. \*\* In labour 7 days or more prior to admission to hospital.



Maternal Deaths.

Register No.	Age.	Gravida.	Maturity (weeks)	Complication of Labour and/or Maternal Complication.	Method of Delivery.	Class I*	Class II*	Group 1*	Group 2*	Births.
635E	27	1	40	Disproportion—Persistent occipito posterior, failed forceps	Forceps	Yes	—	Yes	—	S.B.M.
1264E	34	1	40	Disproportion—Contraction ring, failed forceps	Forceps	Yes	—	Yes	—	S.B.M.
						2	—	2	—	2

Maternal Mortality Rates.

Per 1,000 booked cases delivered..	..	..	..	Nil
Per 1,000 emergency cases delivered	..	..	..	34.5
Per 1,000 cases delivered ..	..	..	..	8.6

\* *Vide* Final Report of Departmental Committee on Maternal Mortality and Morbidity, 1932. Class I.—Deaths directly due to child-bearing (abortions and ectopics are not included here); Class II.—Death due to an independent disease; Group I.—Cases showing a primary avoidable factor; Group 2.—Case showing no primary avoidable factor. E. after a register number indicates an emergency case.

III.—MATERNITY INFANTS' REPORT.

BIRTHS.

								Per cent.
Full-time	..	..	..	..	..	..	182	78·4
Premature	..	..	..	..	..	..	31	12·7
Stillborn	..	..	..	..	..	..	21	8·9
Total births								100
Average weight at birth of infants—booked cases								7 lbs. 2 ozs.
Average weight at birth of infants—emergency cases								6 lbs. 15 ozs.
Infants not entirely breast-fed								14

STILLBIRTHS.

Details of 21 Stillbirths.

Maternal Complication.	Method of Delivery.	Infant.	Cause of Foetal Death.
<i>Booked (6)—</i>			
Toxæmia .. .. .	Forceps .. ..	F.T. ..	Tentorial tear.
Toxæmia .. .. .	Natural forces ..	P. ..	Maternal toxæmia.
Toxæmia .. .. .	Manual, breech ..	P. ..	Hydrocephalus.
Toxæmia .. .. .	Manual, transverse	P. ..	Complication of labour.
Disproportion .. ..	Forceps .. ..	F.T. ..	Hydrocephalus.
Placenta prævia .. ..	Natural forces ..	F.T. ..	Detached placenta.
<i>Emergencies (15)—</i>			
Contracted pelvis .. ..	Forceps .. ..	F.T. ..	Complication of labour.
Contracted pelvis .. ..	Forceps .. ..	F.T. ..	Complication of labour.
Toxæmia, ante partum hæmorrhage ..	Manual, breech ..	P. ..	Maternal toxæmia.
Toxæmia, ante partum hæmorrhage ..	Manual, breech ..	P. ..	Maternal toxæmia.
Toxæmia, ante partum hæmorrhage ..	Cæsarean .. ..	F.T. ..	Maternal toxæmia.
Complicated breech .. ..	Manual, breech ..	F.T. ..	Complication of labour.
Complicated breech .. ..	Manual, breech ..	F.T. ..	Complication of labour.
Persistent occipito posterior .. ..	Forceps .. ..	F.T. ..	Complication of labour.
Persistent occipito posterior, toxæmia..	Forceps .. ..	F.T.M. ..	Maternal toxæmia.
Disproportion—failed forceps .. ..	Forceps .. ..	F.T.M. ..	Post maturity.
Disproportion—failed forceps—contraction ring .. ..	Embryotomy ..	F.T. ..	Complication of labour.
†Rigid cervix—contraction ring .. ..	Cæsarean .. ..	F.T. ..	Complication of labour.
†Rigid cervix— .. ..	Cæsarean .. ..	F.T. ..	Complication of labour.
Placenta prævia .. ..	Natural forces ..	P. ..	Detached placenta.
*Rudimentary horn .. ..	Cæsarean-hysterectomy	F.T.M. ..	Maternal toxæmia.

F.T. = Full-time.      F.T.M. = Full-time macerated.      P. = Premature.

Summary of Causes of Stillbirths.

Cause of Stillbirth.	Booked.	Emergency.	Totals.
Maternal conditions .. .. .	1	5	6
Complication of labour .. .. .	1	8	9
Placental states .. .. .	1	1	2
Foetal states .. .. .	3	1	4
Unknown .. .. .	—	—	—
Totals .. .. .	6	15	21

\* Case published by Dr. J. Morgan and Mr. R. Rutherford, *Lancet*.  
† In labour 7 days or more prior to admission.

NEO-NATAL DEATHS.

Details of the 10 Neo-natal Deaths (Deaths within 4 weeks of Birth).

Cause of Death.	Maternal Complication.				Method of Delivery.		Weight at Birth.	Age.
							lbs. ozs.	
<i>Booked (4)—</i>								
†Prematurity ..	Toxæmia	..	..	..	Natural forces	..	3 0	8 hours.
†Prematurity ..	Toxæmia	..	..	..	Natural forces	..	2 10	3½ hours.
Prematurity ..	Syphilis	..	..	..	Natural forces	..	5 1½	5 days.
Surgical shock ..	Rheumatic carditis	..	..	..	Cæsarean	..	6 0	7 hours.
<i>Emergency (6)—</i>								
Prematurity ..	Toxæmia	..	..	..	Natural forces	..	2 11	1 hour.
Prematurity ..	Rheumatic carditis	..	..	..	Natural forces	..	1 9	3½ hours.
Prematurity ..	Acute hydramnios	..	..	..	Natural forces	..	1 14¼	3 days.
Prematurity ..	Ante partum hæmorrhage	..	..	..	Natural forces	..	—*	1½ hours.
Tentorial tear ..	Toxæmia and disproportion	..	..	..	Forceps	..	8 2	18 hours.
Melæna neonatorum ..	Placenta prævia	..	..	..	Natural forces	..	7 8	2 days.

\* Not recorded. † Multiple labour.

Summary of Causes of Neo-natal Deaths.

—							Booked.	Emergency.	Totals.
Prematurity ..	..	..	..	..	..	..	3	4	7
Birth injury ..	..	..	..	..	..	..	1	1	2
Hæmorrhagic disease of new-born ..	..	..	..	..	..	..	—	1	1
Totals ..							4	6	10

INFANTILE MORTALITY RATES.

	Per cent.
Of 234 infants born	21 were stillborn and 10 died = 13·3
Of 213 infants born alive	10 died within 4 weeks of birth = 4·7
Of 25 premature infants born alive	7 died within 4 weeks of birth = 28

IV.—ANALYSIS OF CASES OF NORMAL AND ABNORMAL PREGNANCY, PARTURITION AND PUERPERIUM TREATED TO A CONCLUSION IN MATERNITY AND OTHER WARDS DURING THE YEAR.

	Totals.*
Pregnancy, normal ..	6
Pregnancy and spurious labour pains ..	9
Toxæmia of pregnancy ..	23
Ectopic gestation ..	2
Pregnancy and ante-partum hæmorrhage ..	2
Pregnancy and concomitant disease ..	29
Abortion, threatened ..	10
Abortion, incomplete and complete ..	88
Abortion, missed ..	—
Abortion, with post-abortum infection/sequelæ ..	12
Labour, normal ..	119
Labour, normal and toxæmia of pregnancy ..	57
Labour, normal and concomitant disease ..	8
Labour, abnormal ..	35
Labour, abnormal and toxæmia of pregnancy ..	8
Labour, abnormal and concomitant disease ..	3
Labour, multiple ..	2
Puerperium normal ..	8
Affections consequent on parturition ..	5
Total ..	426

\* Booked and emergency cases not distinguished.



Among the 426 cases analysed above, there occurred 5 deaths. Details of 2 of these are given under the head of maternal deaths. The remaining 3 occurred in emergency cases. One was due to puerperal sepsis in a woman admitted for that condition after delivery in the neighbourhood; one was due to post partum hæmorrhage in a woman admitted in a moribund condition, who died one hour after admission, and one who died from volvulus of a mal-rotated gut and who aborted prior to death.

ABORTION.

(Therapeutic inductions and cases of threatened abortion are not included.)

Cases treated to a conclusion .. .. .	100
Pyrexial cases .. .. .	12
Death .. .. .	1
<hr/>	
Pyrexial cases and death .. .. .	13
<hr/>	
Maternal morbidity rate per 1,000 women who aborted .. .. .	130

7. Pathological Department.

Analysis of Investigations made during the Year.

	Made at	
	Hillingdon County Hospital.	Other Hospitals.*
Ear, nose and throat swabs—culture for organisms ..	25	87
Cervix uteri swab—culture for organisms .. .. .	28	4
Pus—stained smears for organisms .. .. .	47	4
„ —culture for organisms .. .. .	—	47
Blood—counts .. .. .	66	14
„ —platelet count .. .. .	1	—
„ —coagulation/bleeding times .. .. .	—	—
„ —grouping .. .. .	42	—
„ —agglutination for T.A.B.C. .. .. .	—	9
„ —Wassermann reaction .. .. .	—	247
„ —chemical estimations .. .. .	139	5
„ —culture for organisms .. .. .	1	10
Cerebro-spinal fluid—various investigations .. .. .	22	83
Pleural fluid—various investigations .. .. .	12	4
Urine—microscopy of centrifugal deposit .. .. .	377	—
„ —bacteriological investigations .. .. .	—	17
„ —chemical investigations .. .. .	328	2
Fractional test meal .. .. .	24	—
Sputum—stained smear for tubercle bacilli .. .. .	244	—
Fæces—direct and cultural investigations .. .. .	10	25
„ —for occult blood .. .. .	41	—
„ —chemical investigations .. .. .	—	1
Miscellaneous investigations .. .. .	3	1
Pathological material for section and report .. .. .	—	120
Post-mortem examinations .. .. .	93	—
<hr/>		2,183
Totals .. .. .	1,503	
<hr/>		2,183
Total investigations .. .. .		

Post-mortem examinations :—

On the bodies of 193 persons who died in hospital, 75 examinations were made. This gives an autopsy rate of 38·8 per cent. The remaining 18 examinations were made on bodies from the Hillingdon Institution, on persons brought in dead and on still-born infants.

\* Investigations made at :—North Middlesex County Hospital (442), West Middlesex County Hospital (39) and King's College Hospital (199).

### 8. Ear, Nose and Throat Department.

#### *Analysis of Operations performed during the Year.*

For aural furuncle, foreign body in ear, &c. . . . .	3
Paracentesis tympani . . . . .	19
Mastoidectomy—(Schwartzc, 16 ; Radical, 3) . . . . .	19
Mastoid cauterisation/curettage/plastic, &c. . . . .	4
Submucous resection of septum . . . . .	2
Antral puncture and washout . . . . .	6
On nose and sinuses (various) . . . . .	17
*Removal of tonsils and adenoids . . . . .	213
Removal of tonsils by dissection . . . . .	38
Quinsies opened . . . . .	2
Laryngoscopy . . . . .	4
Mastoid/aural examination/dressing under general anæsthesia . . . . .	2
<b>Total . . . . .</b>	<b>329</b>

*Operative Mortality.*—There were two deaths. One was in a child aged 8 months, who died within half-an-hour of an operation for acute mastoiditis. The other was in a girl aged 15, who had had bilateral myringotomy performed shortly before death from septic meningitis.

### 9. Therapeutic, Diagnostic and Prophylactic Procedures.†

#### *Analysis of Special Procedures.*

Injection of serum or vaccine . . . . .	†
Injection of saline, subcutaneous and intraperitoneal . . . . .	†
Multiple punctures of œdematous legs . . . . .	†
Autohæmotherapy . . . . .	†
Blood transfusion (auto and hetero) . . . . .	31
Intravenous injection of saline or drug . . . . .	9
Venesection . . . . .	8
Lumbar puncture . . . . .	97
Paracentesis of pleural cavity . . . . .	85
Paracentesis of abdominal cavity . . . . .	4
Gastric lavage . . . . .	†
Jennerian vaccination . . . . .	3
CO <sub>2</sub> Snow application . . . . .	23
<b>Total . . . . .</b>	<b>260</b>

### 10. Casualty and Out-Patient Departments.

§Casualties—medical and surgical . . . . .	1,694
In-patients made out-patients . . . . .	462
Ante-natal cases . . . . .	275
<b>Total casualties and out-patients treated . . . . .</b>	<b>2,431</b>
<b>Total number of attendances made . . . . .</b>	<b>12,753</b>
<b>Average number of attendances per patient . . . . .</b>	<b>5.2</b>

\* This total includes 13 major operations. In children tonsils are removed by dissection and for purposes of classification the removal of tonsils in children under or over the age of 12 years is deemed a minor or major operation respectively.

† None of these has been included in the foregoing list of operations.

‡ Not recorded for the year 1934.

§ Includes patients referred by medical practitioners for a specialist's opinion and/or some special investigation or form of treatment.

Operations—

Suturing of wound	..	..	..	..	..	..	..	97
Toilet and tannic acid treatment of burns and scalds	..	..	..	..	..	..	..	3
Incision of abscess, &c.	..	..	..	..	..	..	..	76
For sinus/ulcer/cyst/or tumour	..	..	..	..	..	..	..	38
Removal of nail	..	..	..	..	..	..	..	11
For septic infection of hand	..	..	..	..	..	..	..	52
Removal of foreign body in eye	..	..	..	..	..	..	..	6
Removal of foreign body in limb..	..	..	..	..	..	..	..	12
Injection of varicose vein, &c.	..	..	..	..	..	..	..	52
Manipulation of fracture or dislocation	..	..	..	..	..	..	..	51
Repair of tendon	..	..	..	..	..	..	..	4
Amputation of finger, thumb or toe	..	..	..	..	..	..	..	6
Genito-urinary, various	..	..	..	..	..	..	..	26
Ear, nose and throat, various	..	..	..	..	..	..	..	29
External version—in ante-natal clinic	..	..	..	..	..	..	..	6
Miscellaneous	..	..	..	..	..	..	..	27
Total	..	..	..	..	..	..	..	496
Anæsthetics—general (Evipan 18)	..	..	..	..	..	..	..	252
Anæsthetics—local	..	..	..	..	..	..	..	120
Total	..	..	..	..	..	..	..	372
Admitted to hospital from out-patient department	..	..	..	..	..	..	..	657
Admitted to hospital from ante-natal clinic	..	..	..	..	..	..	..	174

11. Nurses' Sick Room.

Number of nurses at 31st December	..	..	..	..	..	..	69
Average daily strength of nursing staff	..	..	..	..	..	..	70
Nurses off duty sick during the year	..	..	..	..	..	..	17*
Nursing days lost	..	..	..	..	..	..	282
Average number of nursing days lost per annum—							
Per sick nurse	..	..	..	..	..	..	16·59
Per nurse on average daily strength	..	..	..	..	..	..	4·03

Disabilities.	No.	Major operations.	Minor operations.
Nose and throat conditions	10	2	—
Injuries	2	—	—
Pulmonary tuberculosis	2	—	—
Influenza	1	—	—
Intestinal conditions	1	1	—
Septic condition of skin	1	—	—
Septic condition of finger	1	—	1
Burns	1	—	—
Measles	1	—	—
Totals	20	3	1

During the year 24·3 per cent. of the nursing staff was admitted to the Sick Room.  
Out of a total of 282 days lost, one nurse was off duty 98 days.

\* Three nurses off duty twice.



## Comparative Tables.

	1932.	1933.	1934.
Beds—complement at 31st December .. .. .	—	—	141
„ —average daily complement .. .. .	—	—	141
„ —average daily number available .. .. .	—	—	133·1
„ —average daily number occupied .. .. .	—	110·2*	130·9
Average daily percentage of available beds occupied .	—	—	92·1
Patients per occupied bed—average number per annum..	—	24·1*	20·5
Nursing staff—average daily strength .. .. .	—	59	70
Occupied beds—average number per nurse .. .. .	—	1·9*	1·9
Admissions—average daily number .. .. .	—	7·2	7·4
„ —percentage by Medical Superintendent .. .. .	—	—	59·7
Length of stay—average in days per patient .. .. .	—	15·1*	17·8
Medical cases .. .. .	—	—	767
Surgical cases .. .. .	—	—	1,920
Total cases treated to a conclusion .. .. .	1,990	2,657	2,687
Patients relieved .. .. .	—	—	88·9
„ unrelieved .. .. .	—	—	3·9
„ died .. .. .	—	—	7·2
Operations—major .. .. .	504	730	652
„ —major and minor .. .. .	1,825	2,126	1,912
Anæsthetics—general .. .. .	1,194	1,417	1,205
Radiological investigations .. .. .	849	1,547	1,774
Massage treatments .. .. .	953	4,604	5,266
Electro-therapeutic and light treatments .. .. .	—	2,013	2,662
Ante-natal clinic—women examined .. .. .	265	169	275
„ „ „ —attendances .. .. .	518	700	1,397
Confinements .. .. .	160	197	232
Maternal mortality rate per 1,000 delivered .. .. .	—	35·5	8·6
Maternal morbidity rate per 1,000 delivered .. .. .	—	128·8	47·4
Births .. .. .	162	201	234
Stillbirth rate .. .. .	7	6	9
Infantile mortality rate per 100 total births .. .. .	11·1	8	11·6
Infantile mortality rate per 100 born alive .. .. .	3·7	2	4·7
Pathological investigations .. .. .	842	2,187	2,183
Casualties and out-patients .. .. .	—	1,839	2,431
Casualty and out-patient attendances .. .. .	—	12,027	12,753

\* Maternity cradles not included.

## APPENDIX VI.

REPORT OF THE PUBLIC HEALTH AND PUBLIC ASSISTANCE COMMITTEE TO THE  
COUNTY COUNCIL.

26th April, 1934.

## APPROPRIATION OF COUNTY POOR LAW HOSPITALS AS HOSPITALS UNDER THE PUBLIC HEALTH ACTS.

In June, 1931, your Committee reported on the question of the appropriation of the five County Poor Law Hospitals and the Edgbury Convalescent Home as establishments for the reception and treatment of the sick under the Public Health Acts, and recommended that they should be so appropriated as from the 1st October, 1931, or such later date as the Minister of Health might approve. Your Committee's recommendation was, however, not accepted by the County Council, who decided that consideration of the matter should be adjourned for six months to enable them to have (1) a comprehensive report by the County Medical Officer of Health on the actual accommodation available and the accommodation necessary to meet the extra services involved, and (2) a report of the administrative arrangements which would be necessary as a result of appropriation.

Since that time consideration of the matter has, with the approval of the Council, been further deferred from time to time.

Your Committee, in their report then submitted, reminded the Council that in the Middlesex (Public Assistance) Scheme, 1929, made by the Council, it is declared to be their intention as soon as practicable to take the necessary steps to ensure that any assistance which can be provided either by way of Poor Relief or by virtue of any of the "Special Acts" shall be provided by virtue of the appropriate Act and not by way of Poor Relief. The "Special Acts" are of course those referred to in Section 5 (1) of the Local Government Act, 1929, and include the Public Health Act, 1875.

Your Committee stated that they were in favour of the carrying into effect of the Council's declaration by means of the appropriation of the Hospitals as Hospitals under the Public Health Acts rather than by means of the other method available, viz., by making a declaration that the provision of hospital treatment by the Council should be provided exclusively by virtue of the Public Health Acts and not by way of Poor Relief, as by the former method the Council would be in a position to treat large numbers of sick persons under their Public Health powers without being restricted in their power to deal with sick persons in institutions under the Poor Law.

It was further pointed out that there were three main aspects from which the question of appropriation could be considered, the first being that of sentiment, a desire to transfer the treatment of sickness out of the Poor Law. The second consideration was the question as to whether the resources at the disposal of the Council were adequate to enable them to appropriate their Hospitals as Public Health Hospitals, the most important factor being that of accommodation. The third consideration was that of finance. Your Committee pointed out also that the appropriation of the Hospitals would have the result of conferring the right of admission on all residents in the County, subject to such conditions as might be laid down, without relieving the Council of their statutory obligation to provide accommodation for the necessitous sick; the removal of the stigma of the Poor Law would probably increase the demand for the services provided, while no persons who were not sick would be able to be maintained in the Hospitals.

Your Committee have now been able to consider the report which the County Council called for from the County Medical Officer on the question of the actual accommodation available in the various establishments concerned and the accommodation that would be necessary to meet the extra services involved by appropriation, together with a report by the appropriate officers on the general question of appropriation and the administrative arrangements that would be necessary in the event of such a step being taken.

The report by the County Medical Officer is in the following terms :—

"In June, 1931, the Public Health and Public Assistance Committee arrived at the decision that there was no longer any substantial reason why the County Council should not put into operation its declared policy, so far as the treatment of patients in hospitals is concerned, of providing assistance otherwise than by way of Poor Law relief. Accordingly the Committee recommended the County Council in June, 1931, to adopt a resolution that, in accordance with Section 53 (2) of the Local Government Act, 1929, and subject to the approval of the Ministry of Health, the undermentioned Poor Law Hospitals and Convalescent Home be appropriated for the reception and treatment of the sick under the Public Health Acts as from the 1st October, 1931, or such later date as may be approved by the Minister :—

North Middlesex Hospital.

Redhill Hospital.

West Middlesex Hospital.

Park Royal Hospital (now Central Middlesex).

Hillingdon Hospital.

Edgbury Convalescent Home.



“ After prolonged discussion the County Council decided to adjourn the matter for six months in order that the Council might have for its information :—

- (1) A comprehensive report of the County Medical Officer of Health on the actual accommodation available at the time and the accommodation necessary to be provided to meet the extra services involved.
- (2) A report of the administrative arrangements which would be necessary.

“ Since the date of this resolution the Public Health and Public Assistance Committee have reviewed the subject of appropriation on several occasions, but up to July, 1933, for various reasons they have decided again to adjourn the matter. In July, however, the Committee considered that the time had arrived when the reports asked for by the County Council should be prepared and given further consideration.

“ The County Council has now had experience of three and a half years’ administration of the hospitals and institutions transferred from the late Boards of Guardians by the Local Government Act of 1929, and at first sight it would appear a simple matter to estimate the adequacy of the Council’s institutional resources by the tabulation of particulars of the accommodation available at these institutions and the extent to which this accommodation has been utilized. Such a simple summary, however, would be most misleading and would not afford the County Council any reliable foundation upon which a future policy could be based.

“ Before giving information as to the actual accommodation in the County Hospitals, &c., therefore, it will be well to consider the various factors which contribute towards the complexity of the problem. Unlike Voluntary Hospitals, which have no legal obligation to deal with any particular patient, the County Council has a statutory duty to make provision for the necessitous sick. No limitation is placed upon this obligation, and therefore the County Council must accept for treatment persons of all ages suffering from the most diverse varieties of ailment, acute surgical and medical conditions, mental disorder, certain contagious conditions, epilepsy, chronic diseases of all kinds, including senility, &c., and in addition pregnancy.

“ From this it is apparent that not only is the Council compelled to make provision for the reception of cases which it is impracticable to accommodate together, but that many of the patients once admitted remain occupying valuable beds for months, years and even until their deaths.

“ A hospital, therefore, may find its wards for patients suffering from acute surgical conditions overcrowded almost to the danger limit, whilst empty beds exist in the Maternity Department, in the Children’s Ward, or elsewhere, and a simple summary of full and empty beds would fail to reveal what might be a serious position at such a hospital.

“ The problem which arises as a result of the County Council’s legal obligation to afford institutional treatment for cases of chronic illness in need of such accommodation is one of great difficulty. The prolonged period of time during which each bed is occupied by a single patient renders it necessary to provide most extensively for this class of case. At the present time, some 1,500 such patients are housed in the Council’s Poor Law Institutions, but the accommodation immediately available is not adequate to permit the evacuation of all chronic cases from the County Council’s hospitals to the institutions. Further, the actual buildings at the hospitals vary in age and construction and some are not adapted, without extensive alteration or reconstruction, for the accommodation and treatment of persons acutely ill.

“ The position at the County Council’s five general hospitals is as follows :—

- (1) Beds suitable for the accommodation of persons suffering from acute medical and surgical conditions—

Male	..	..	..	..	..	..	..	..	680
Female	..	..	..	..	..	..	..	..	696
Children	..	..	..	..	..	..	..	..	283

N.B.—Many of the above beds at the present time are occupied by chronic cases.

- (2) Beds reserved for maternity cases (not including babies’ cots) .. .. 172
- (3) Beds reserved for persons suffering from advanced tuberculosis .. 33
- (4) Beds reserved for mental cases .. .. 62

(A number of mental cases also occupy beds classified as suitable for cases of acute or chronic disease,)

- (5) Beds suitable for cases of chronic illness—

Males	..	..	..	..	..	..	..	..	206
Females	..	..	..	..	..	..	..	..	480

“ The question as to the extent to which the accommodation scheduled above can meet the present and future needs of the County also is one of great complexity. During the winter of 1932–3 an epidemic of influenza frequently complicated by pneumonia resulted in gross overcrowding throughout the whole of the hospitals and institutions—and this notwithstanding the relief emergency accommodation of eighty beds which was provided at the North Middlesex County Hospital.



“ The summer of 1933 was exceptionally fine, but pressure on beds for chronic cases has continued undiminished and the demand for beds for cases of acute illness also was unusually large for the time of the year.

“ With regard to the future, no information is available as to the extent to which the appropriation of the County Council's Hospitals as Public Health Hospitals is likely to increase the requests for accommodation from residents in Middlesex, but it is reasonable to suppose some increase will result.

“ The need for more beds consequent upon the increasing population of the County is even more difficult to estimate. During the past decade the growth of population in Middlesex has been phenomenal, *i.e.*, 385,726, and this increase was more marked during the latter part of the decade. As to whether this rate of increase is likely to be maintained and for how long, are questions upon which opinion is divided. For whilst there still is much undeveloped land suitable for building in the County, and the cult of fresh air and sunshine is increasingly popular, the birth-rate over the country as a whole is falling and there is evidence of a revival of the old staple industries in the North which may tend to diminish the flow of population southwards which has marked the years of industrial depression.

“ Taking all these factors into consideration, however, it is a reasonable assumption that the five existing County Council general hospitals should be adequate to meet the needs of the County in respect of the treatment of acute medical and surgical conditions for some years to come whether the hospitals be appropriated or not, provided that the County Council's policy as set out below be continued :—

- (1) Cases of a chronic nature be gradually transferred from the five County Council hospitals so that the whole or the greater part of the hospital accommodation is available for the treatment of acute medical and surgical conditions.
- (2) A carefully planned scheme of modernization of the wards in the hospitals be carried out so as to render them more suitable for the treatment of acute conditions.
- (3) Such enlargements as are proved to be necessary be made at the two County Council's hospitals not yet fully developed, namely Redhill County Hospital and Hillingdon County Hospital.
- (4) Better facilities be provided for dealing with out-patients at all the County hospitals.

“ With regard to the first objective, it is evident that the most economical and efficient method by which this can be attained, is by the increased utilization, for persons suffering from chronic disease of the Poor Law institutions, adjoining, or in the neighbourhood of, the County Council hospitals, and these if suitably adapted and reserved for the reception of the chronic sick should go far towards meeting all the County Council's obligations to this class of the community.

“ The most pressing problem with which the County Council is now dealing is the provision of alternative accommodation for those inmates of institutions who are not ill but only destitute. Examples of the action the County is taking are the acquisition of White Webbs for the accommodation of old men, the adaptation of Redhill Children's Block for the same purpose, and the decision to adapt Percy House for inmates of both sexes.

“ As the County Council's policy gradually relieves pressure on hospital and institutional beds, a further development must follow, namely the reservation of separate accommodation at one or more of the hospitals for the reception of cases of venereal disease, for the provision of suitable accommodation for persons threatened with mental breakdown, for the segregation of cases of advanced tuberculosis near their own homes, &c.

“ It must not be forgotten that the Middlesex County Council in agreement with the Hertfordshire County Council has the use of 150 beds for sick persons at the Wellhouse Hospital and 130 beds for healthy in the adjoining institution. This agreement in the future may be terminated by the Hertfordshire Council if their own needs become urgent, as in fact has been the case with the Middlesex Council's agreement with Surrey. The termination of this latter agreement by the Surrey County Council on the 31st March, 1933, deprived Middlesex of accommodation for 80 sick persons and 35 healthy at Kingston Hospital and Institution. Whether the termination of the Hertfordshire agreement and the continued growth of population may in the future necessitate the erection of an additional hospital for acute medical and surgical cases or an additional hospital for more chronic cases cannot be foretold, but the policy outlined above should efficiently meet the needs of the County for some time to come and can gradually be developed without the necessity for the very large and immediate capital expenditure which the erection of an entirely new hospital would entail.

J. TATE,

*County Medical Officer of Health.*”

“ 29th September, 1933.”

The above report by the County Medical Officer includes all the information on the question of accommodation possible up to the date thereof. Since then steps have been taken with a view to the provision of additional accommodation by the erection of buildings at Edgware for 200 to 250 chronic sick, extensions to Hillingdon County Hospital to accommodate 64 beds, etc., evacuation



of children from Chase Farm Schools to make room for adults thus allowing Edmonton House to be used as an extension to North Middlesex County Hospital, the evacuation of the Children's Block at Hillingdon County Hospital and its conversion for hospital purposes, the utilisation of Hounslow Hospital-Dispensary as an annexe to Warkworth House, and the establishment of a new Children's Home and Receiving Ward at East Bedfont as an alternative to Receiving Wards at Institutions. Further, the question of the acquisition of another mansion similar to White Webbs, Enfield, is under consideration, for the purpose of accommodating aged female inmates now in Institutions.

Turning now to the general questions involved, your Committee would point out that, inasmuch as the Council's Administrative Scheme states that it is the intention of the Council as soon as practicable to secure that all assistance which can lawfully be provided otherwise than by way of poor relief shall be so provided, the question which your Committee have had to consider is whether it is now practicable to fix a date on which the appropriation of the hospitals and convalescent home for public health purposes can take place. As admission to the hospitals is now governed by the Poor Law, the County Council are, strictly speaking, under an obligation only to admit to those hospitals persons who are destitute. This does not necessarily mean destitute in a pecuniary sense, but that such persons are so situated in regard to the need for medical treatment. After appropriation, however, every person in the County could expect to receive treatment at these hospitals unless the Council placed some specific limitations on admission. For convenience, the County Medical Officer's report may here be summarised by saying that the existing hospitals should be adequate for some years to come whether or not appropriation takes place, provided that (1) chronic cases be transferred from the hospitals to secure greater hospital accommodation for medical and surgical cases, (2) hospital wards be modernized to render them more suitable for treatment of such cases, (3) the Redhill and Hillingdon County Hospitals be enlarged, and (4) better facilities be provided at all the hospitals for out-patients.

This policy, which necessitates considerable capital expenditure, is, in fact, being carried out, but up to the present the relief to pressure upon accommodation has not been in excess of the demands under the Council's statutory obligations and with the continual rapid growth of the County may not be so for several years to come. A considerable increase in the number of persons seeking treatment in the hospitals consequent upon the removal of any poor law stigma by reason of appropriation must be expected. Pending the completion of the matters referred to by Dr. Tate, the Council may, therefore, be faced with a serious shortage of accommodation.

On the other hand, the principal effects of appropriation would be (1) that the provisions of Section 16 of the Local Government Act, 1929, would be operative and confer on the Council enlarged rights in respect of the recovery of the cost of treatment and (2) freedom from detailed control of the Minister of Health as regards administration. In connection with (1), however, if the provisions of the Council's Bill now before Parliament, under which all hospital treatment may be regarded as having been given on loan, becomes law, there will not be much gained in this connection by appropriation. In considering the question of accommodation, it must be borne in mind that even after appropriation sufficient accommodation must be available for those destitute persons who have a statutory right by virtue of the Poor Law to hospital treatment. Appropriation will not make any material difference to the question of "settlement" nor should it make any great difference in recovering the cost of treatment afforded to persons residing outside Middlesex who may require hospital treatment by reason of accident or sudden illness when in this County.

The Council will appreciate from the foregoing that the main question for consideration is how soon the accommodation which will be necessary when appropriation takes place will be available. Enquiries have been made of several County Councils whose areas contain a large population and it has been ascertained that with the exception of the London County Council none of such bodies has yet appropriated any of their Poor Law establishments. In London, however, the position is very different, not only from that obtaining in Middlesex but generally speaking from that of the rest of the country, because there are in the County of London a large number of voluntary hospitals of considerable size and with up-to-date equipment, so that it may be taken that few of the large number of patients provided for at these voluntary hospitals elect to come for treatment at the appropriated hospitals in London.

With regard to the administrative arrangements which would arise on the appropriation of the hospitals, these may be considered under two headings :

(1) *By your Committee.*—As the Public Assistance Order, 1930, of the Minister of Health would not apply after appropriation, the obligation which now exists for the appointment of a management or house committee would cease, though this obligation would still continue as regards the Institutions (workhouses), and in any case the appropriated hospitals would require to be under the control of a management committee. It would, however, be a question for consideration by your Committee whether the administrative arrangements that may be made for the management of the hospitals after appropriation and the assessments of the amounts to be paid by public health patients therein should be combined or not, and whether some rearrangement in the distribution of the functions of your Committee among certain of their sub-committees would not also be necessary.

In regard to the question of assessment of contributions the volume of the work and the necessity for early action has given cause for considerable thought as to the procedure to be adopted. In



this connection the course to be followed must, to some extent, depend upon whether the Council obtain the powers they are now seeking in the General Powers Bill under which local committees will be appointed in lieu of guardians committees. If the powers in question are conferred upon the Council then the local committees could discharge not only the functions which are now exercised by guardians committees but such other functions as may be approved by the Minister of Health so that these new committees might be able to assess both poor law cases proper as well as public health patients.

It is probable that many members now serving on guardians committees would be appointed to serve on the new local committees. If, however, the Council do not obtain the powers in question, then, as the guardians committees would continue to function under the Poor Law alone, they could no longer be concerned in the assessment of public health patients or in matters incidental thereto, but these duties would have to be carried out by the Council in the same way as their ordinary functions. Whether or not the Council obtain the powers in question, it would be desirable for provisional assessments of public health patients to be made departmentally as quickly as possible and for such provisional assessments to be submitted to a committee for confirmation. This confirmation might be given by the management committee of the particular hospital or, if the new powers in question are obtained, by the local committees as may subsequently be decided.

(2) *By the Staff*.—In so far as the work in regard to assessments ceases to be done by the guardians committees, either by the whole of their duties being transferred to the local committees or by reason of their inability to make assessments in respect of public health patients, certain staff of the Public Assistance Department now engaged in the work of the guardians committees would become available to assist in the work of such committees as may ultimately be charged with the function of assessing public health patients. It would, however, be necessary, in order to avoid any poor law stigma attaching to persons treated in the appropriated hospitals, that certain duties should, at any rate as far as name is concerned, be removed from the poor law.

There are naturally objections to enquiries as to means being made of public health patients by poor law officials, on admission to or while inmates of a hospital. It is accordingly considered that it would be necessary to extend the almoner system to each of the appropriated hospitals and to arrange for a chief almoner in each hospital. Under each chief almoner there would be the requisite assistants and clerical staff, the latter being recruited as far as possible from any redundant staff at the local public assistance offices.

It must not, however, be assumed that the additional expenditure incurred as regards the extension of the almoner system would be covered by additional receipts. There are also objections to relieving officers as such making outside enquiries as regards public health patients and arrangements would have to be made accordingly.

With regard to the internal administration of the hospitals, as the Public Assistance Order would no longer apply, your Committee would be able to make such arrangements as they might consider expedient. So far as the collection of contributions is concerned, there would appear to be no reason why this should not continue to be carried out in the County Accountant's Department. The extension of the right of recovery would, however, lead to increased work being cast upon the collectors and similarly there would be more cases in which legal proceedings would be necessary to recover the amounts due to the Council.

So far as the question of finance is concerned, it is of course impossible, in view of the peculiar nature of the proposed change, to give any reliable estimate of the increase in expenditure which would be involved. The amount of any increased user of the hospitals, or the increase or decrease in the sums recoverable in respect of treatment, cannot be estimated. With regard to the cost of the administrative work involved in assessment and collection, it is possible to estimate tentatively, but even there substantial amendment may be necessary in the light of experience. In this respect, however, your Committee estimate that the additional expenditure in the first year of appropriation would be £2,600. This figure is based on the assumption that the salaries of staff necessary for the purpose would amount to £5,600, from which amount is deducted the sum of £3,000, being salaries of existing officers who, it is thought, could be transferred from the public assistance staff.

Your Committee have given very careful consideration to the question as to the date on which it would, in their opinion, be safe for the hospitals to be appropriated as Public Health establishments and, in doing so, have had particular regard to the steps which are being taken to provide alternative accommodation for workhouse inmates who are not sick, thus allowing chronically sick patients to be transferred from the hospitals to the institutions and enabling the hospitals to be utilised entirely for the acutely ill. Your Committee realise also that any decision of the Council to appropriate the hospitals ought to be made some considerable time before the appropriation is to become effective and that it would be necessary for the consent of the Minister of Health to be obtained. They have accordingly come to the conclusion that it would be advisable to allow an interval of approximately two years to elapse before the appropriation is to take place, and they feel that, if the 1st April, 1936 be now decided upon, there is reasonable ground for assuming that, in the absence of any unforeseen or abnormal circumstances arising, the necessary arrangements could be proceeded with to enable the appropriation to take place on that date with the minimum of disturbance to the services provided by the Council and with sufficient resources in being to bear any increased strain put upon them.



Your Committee accordingly recommend :—

That, subject to the consent of the Minister of Health, the undermentioned Poor Law establishments be appropriated, in accordance with the provisions of Section 53 (2) of the Local Government Act, 1929, for the reception and treatment of the sick under the Public Health Acts as from the 1st April, 1936, or such later date as may be approved by the Minister :—

Central Middlesex County Hospital.

Edgbury Convalescent Home.

Hillingdon County Hospital.

North Middlesex County Hospital.

Redhill County Hospital.

West Middlesex County Hospital.

In order to comply with section 80 of the Local Government Act, 1888, the Finance Committee are being asked to submit to the County Council an estimate of a sum of £2,600 in respect of the administrative work which it is anticipated would be involved as a result of the appropriation of the establishments referred to.

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